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ARTICLES

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DECENTRALIZING STD SURVEILLANCE

INTRODUCTION

For six years, Tony Perkins met scores of women through the online site plentyoffish.com and exposed them to AIDS.[1] At least twenty-six women are pressing criminal charges for his failure to warn and endangerment of their health.[2] The women in the Perkins case are being tested for HIV, the virus that causes AIDS.[3] As of February 2010, none of the women had tested positive for the disease.[4] The Texas women who Philippe Padieu met, often online, and exposed to HIV were not so fortunate.[5] Padieu transmitted HIV to at least six of the women.[6]

The cases from America's heartland came as a shock.[7] But they should not. Rather, they illustrate the need for better earlier intervention. The cases also illustrate the need to dislodge narratives about who is vulnerable to infection and who is not. Historically, sexually transmitted diseases have been treated as an affliction of the morally degenerate "Other" and the consequence of deviation from the dominant sexual culture.[8] However, sexual culture and our national sexual health have evolved. Sexually transmitted diseases (STDs, also referred to as STIs)[9] are widespread and spreading further.[10] There are nineteen million new

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1. John Tuohy, *'Seducer' Had His Way – And A Secret*, INDIANAPOLIS STAR, Feb. 25, 2010, at A1, *available at* 2010 WLNR 3953964.

2. Kevin O'Neal, *More Charges Filed in AIDS-Disclosure Case*, INDIANAPOLIS STAR, Mar. 17, 2010, at A19, *available at* 2010 WLNR 5567375.

3. Tuohy, *supra* note 1.

4. *Id.*

5. Diane Jennings, *Man Who Spread HIV Gets 45 Years*, DALL. MORNING NEWS, May 30, 2009, at 1B, *available at* 2009 WLNR 10294840.

6. *Id.*

7. *See, e.g.*, Transcript, *20/20: HIV Positive Man Busted by Women He Lied to, Victims Speak Out* (ABC television broadcast Sept. 19, 2009), *available at* 2009 WLNR 18608524 (detailing case and resulting alarm).

8. *See, e.g.*, M.W. Adler, *The Terrible Peril: A Historical Perspective on the Venereal Diseases*, 281 BRIT. MED. J. 206, 207-09 (1980) (discussing that, historically, medical commissioners believed venereal diseases were "intimately connected with vicious habits," to be abated by "rais[ing] moral standards," and how morally fallen others, often foreign women and prostitutes, were blamed); Allan M. Brandt, *AIDS in Historical Perspective: Four Lessons from the History of Sexually Transmitted Diseases*, 78 AM. J. PUB. HEALTH 367, 367-68 (1988) (noting that venereal disease was conceived as a threat, that it was the consequence of deviation from Victorian sexual values, and that, in modern times, HIV/AIDS fears also reflect social constructs that "strongly associate [HIV/AIDS] with behaviors which have been traditionally considered deviant"); *see also id.* at 367-68 (contrasting the xenophobia surrounding syphilis with the homophobia and moral opprobrium surrounding HIV/AIDS).

9. STIs stands for the broader, less affectively-evocative umbrella term "sexually transmitted infections," which captures a wider range of ailments. Both terms are used in the literature. In this Article, I use STDs because the policy prescriptive is focused on the most concerning sexually transmitted diseases.

10. For more statistics, see *infra* Part I.

STD infections each year, according to Centers for Disease Control and Prevention (CDC) estimates.[11] Transmission is facilitated by social, cultural, and technological shifts and the increasingly prevalent phenomena of online connections with near-strangers, concurrent partners, and casual partners—whether one party realizes her partner is having sex with others or not.[12]

Sexual culture has changed since the early 1900s, when the nation's STD surveillance paradigm crystallized.[13] These social shifts strain our STD surveillance polices and laws, which remain strongly shaped by the inherited paradigm of the past.[14] Surveillance strategies include disease reporting, sexual contact tracing, and data collection regarding individuals infected with STDs, such as the four nationally reportable diseases of Chlamydia, gonorrhea, syphilis, and chancroid, and HIV/AIDS under certain state statutes.[15] Information and power is centralized in the state, which receives, stores, and sometimes acts—albeit with increasing infrequency in a time of severe budgetary strain—on information reluctantly reported by healthcare providers.[16]

Because of targeted intervention and concentrated surveillance in low-income health settings, socially and economically marginalized groups continue to bear the heaviest burden of surveillance.[17] Sexual culture shifts and the resulting health ramifications, however, cut across traditional social categories such as class, age, sexual orientation, and race.[18] Interventions aimed at improving informed consent to sexual health risks should also cut across communities. There is an information deficit in the meet/meat marketplace[19] of

11. *Sexually Transmitted Diseases in the United States, 2008*, CENTERS FOR DISEASE CONTROL & PREVENTION, http://www.cdc.gov/std/stats08/trends.htm (last updated Nov. 16, 2009).

12. *See, e.g.*, Kevin A. Fenton, *Time for Change: Rethinking and Reframing Sexual Health in the United States*, 7 J. SEXUAL MED. (Supp.) 250, 250-51 (2010) (detailing factors accelerating risks and STD spread).

13. For an illuminating history of the rise of the STD surveillance paradigm of control, see AMY L. FAIRCHILD ET AL., SEARCHING EYES: PRIVACY, THE STATE AND DISEASE SURVEILLANCE IN AMERICA 7-15, 33-49, 60-70 (2007).

14. *See infra* Part I.

15. *See generally* CTRS. FOR DISEASE CONTROL & PREVENTION, HIV SURVEILLANCE REPORT 5-78 (2009) (collecting HIV/AIDS data based on confidential name-based reporting laws implemented in all 50 states as of April 2008); CTRS. FOR DISEASE CONTROL & PREVENTION, SEXUALLY TRANSMITTED DISEASE SURVEILLANCE, 2009 1, 5-134 (2010) (data) [hereinafter STD SURVEILLANCE].

16. *See, e.g.*, FAIRCHILD, *supra* note 8, at 61-62, 79-80 (detailing physician reluctance); Helen Ward, *Partner Notification and Contact Tracing*, 33 MED. 28, 29 (2005) (describing contact tracing); *see also infra* Section I.A (discussing budgetary strain).

17. *See infra* Section I.B.

18. *See infra* Part II.

19. I use this as shorthand for the colloquial concept of the "meat market" of parties, bars, dance clubs, and other venues where people seek potential sexual partners and the online marketplace for meeting people explored *infra* Section II.B. *See* JONATHAN GREEN, CASSELL'S DICTIONARY OF SLANG 933 (2d ed. 2005) (defining meat market as slang since the 1950s for "anywhere that people gather for the primary purpose of finding sexual partners").

increasingly prevalent casual sex and, consequently, a need for reliable information. The lack of reliable information leads to reliance on inaccurate and often racially biased heuristics—cognitive rules of thumb—about who is "safe" and who is not.[20]

This Article explores how public health policies can respond to changing sexual culture and the need for more reliable information sharing. Specifically, it recommends facilitating voluntary test results sharing and priority flagging of actors most in need of intervention. Such approaches devolve power into the hands of people in the marketplace by creating a system of decentralized carrots and sticks. The carrot strategy seeds a healthier culture of verification through the incentive of enabling individuals to become more marketable as a potential sex partner. More reliable verification may be enabled through password-protected results web pages that may be readily shared with potential partners, facilitating informed consent to sex and enhancing marketability.

The stick strategy focuses on the challenge of potentially problematic actors who repeatedly infect partners without disclosing disease status. The Article advocates for utilizing the better vantage of doctors to identify potentially problematic actors based on reports by patients, in the privacy of the doctor's office, about individuals whom the patient believes deceived them and, potentially, others. In a time when budget-strapped public health authorities are in triage mode and unable to engage in contact tracing for all cases, a priority flag approach would be more efficient in identifying potentially problematic actors in need of stronger surveillance and educational intervention. This method of identification is also salutary because it relies on accounts of behavior warranting concern, rather than on heuristics about who is high-risk that may reinforce old stigmas and stereotypes.

This Article proceeds in three parts. Part I discusses the traditional state-centric out-group focus of STD surveillance and the survival by transformation of aspects of the paradigm today. Part II discusses the information deficit in the marketplace for sex and romance and how the deficit impedes informed consent to sex. Part III argues for decentralizing and devolving power to seed a healthier culture of informed consent and to improve the identification of actors most in need of intervention based on behavior.

I. THE STD-SURVEILLANT STATE UNDER STRAIN

The patchwork of public health laws regulating sexually transmitted diseases bears the imprint of the fears of the past. Disease control law is an agglomeration of state responses to shifting historical health concerns, impeded in efficacy by the antiquity of the provisions.[21] Part of this heritage of the past, carried forward

20. *See infra* Part III.

21. Lawrence O. Gostin et al., *The Law and the Public's Health: A Study of Infectious Disease*

into the present on different rationales, is an expensive and cumbersome model of concentrating information and power in the state.[22] Another aspect of this heritage is the concentration of the heaviest interventions and surveillance on the socially marginalized—prostitutes, sexual minorities, people of color, and the poor.[23] Section I.A discusses the expensive state-centric model of STD surveillance. Section I.B discusses the disparate burdens of surveillance and intervention that the socially and economically marginalized continue to bear.

A. Budget Cuts and the Beleaguered Public Health Paradigm

Contact tracing, also called partner notification, was a practice that took root during the 1920s attempt to control syphilis.[24] This approach remains the cornerstone of public health management of sexually transmitted diseases today. The goal of contact tracing is to remove nodes of further transmission through testing, counseling, and education.[25] The vast majority of state public health laws explicitly provide for contact tracing for communicable diseases, particularly HIV/AIDS and other sexually transmitted diseases.[26] Reflecting an often-tense alliance between physicians and public health authorities, the laws mandate that doctors (and, in some statutes, other professionals such as nurses and school officials) report sexually transmitted diseases to public health authorities on pain of sanctions.[27] For example, California regulations state, "It shall be the duty of every health care provider, knowing of or in attendance on a case or suspected case of any of the diseases or conditions listed [below], to report to the local

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Law in the United States, 99 COLUM. L. REV. 59, 102 (1999).

22. Section I.A analyzes this approach.

23. For a history, see FAIRCHILD, *supra* note 13, at 7, 9-10; and Gostin et al., *supra* note 21, at 110.

24. Matthew Hogben et al., *Partner Notification & Management Interventions*, *in* BEHAVIORAL INTERVENTIONS FOR PREVENTION AND CONTROL OF SEXUALLY TRANSMITTED DISEASES 170-71 (Sevgi O. Aral et al. eds., 2007).

25. *See, e.g.*, M. Hogben et al., *Physicians' Opinions About Partner Notification Methods: Case Reporting, Patient Referral and Provider Referral*, 80 SEXUALLY TRANSMITTED INFECTIONS 30, 30-31 (2004) (breaking cycle); Patricia Kissinger & David Malebranche, *Partner Notification: A Promising Approach To Addressing the HIV/AIDS Racial Disparity in the United States*, 33 AM. J. PREVENTATIVE MED. S86, S86-S87 (2007) (changing behavior through notification).

26. *See* Lawrence O. Gostin & James G. Hodge, Jr., *Piercing the Veil of Secrecy in HIV/AIDS and Other Sexually Transmitted Diseases: Theories of Privacy and Disclosure in Partner Notification*, 5 DUKE J. GENDER L. & POL'Y 9, 28 tbl.A (1998).

27. *See, e.g.*, CAL. HEALTH & SAFETY CODE § 121022(a) (West 2011) (imposing duty to report on healthcare providers); 410 ILL. COMP. STAT. 325/5(a) (2011) (imposing duty on physicians, nurses, physician's assistants and nurses to report); IND. CODE §§ 16-41-2-2, 16-41-2-3 (imposing reporting requirements on physicians); MICH. COMP. LAWS §§ 333.5114a (2011) (imposing duty to report on governmental entities and persons obtaining from an HIV-positive subject a positive HIV test result); TEX. HEALTH & SAFETY CODE § 81.042 (West 2011) (imposing duty to report on doctors, school officials, nurses, nursing home and home health administrators and other actors).

health officer for the jurisdiction where the patient resides."[28] Reportable STDs include diseases such as HIV, syphilis, chlamydia, gonorrhea, and viral hepatitis.[29] Failure of healthcare providers to report the diseases is criminalized as a misdemeanor[30] and is also a citable offense by the California Medical Board.[31]

In an era when public health funding has been "in chronic decline," labor-intensive contact tracing is proving too costly to pursue in many cases.[32] In contact tracing, a doctor asks a patient who has been diagnosed with a communicable STD to voluntarily disclose his or her sexual contacts, including potential transmitters and infectors.[33] The goal is to notify sexual contacts disclosed by the infected patient, termed the "index case," so they can get tested and treated.[34] Notification can be delivered in one of three ways. In "provider notification," health officials do the notification, whereas in "patient referral," the patient does the notification. Under a "conditional referral" regime, the patient has a specified period in which to notify the partners and if the patient does not do so, the provider does the notification.[35]

While statutory regimes vary somewhat in the details,[36] the most typical approach is for doctors to report information to public health officials, who must track down all the reported contacts.[37] Officials encourage reported contacts to get tested and may offer counseling and education.[38] The investigation continues by seeking the sexual contacts of each reported contact, in an expanding network.[39] The processes of tracking down, notifying, and counseling about testing and risk reduction repeat until all traceable contacts have been reached.[40]

The manpower-intensive process of contact tracing and notification is putting strain on budget-strapped public health agencies, which have few employees to do the work of many.[41] Out of necessity, agencies have had to

28. CAL. CODE REGS. tit. 17, § 2500(b) (2011).

29. *Id.* at § 2500(j).

30. CAL. HEALTH & SAFETY CODE § 120295 (West 2011) (making a violation "punishable by a fine of not less than fifty ($50) nor more than one thousand ($1,000), or by imprisonment for not more than 90 days, or by both").

31. CAL. CODE REGS. tit. 16, §§1364.10-1364.11 (2011).

32. Gostin et al., *supra* note 21, at 95.

33. Ward, *supra* note 16, at 28, 29.

34. Gostin & Hodge, *supra* note 26, at 26-34.

35. Pamina M. Gorbach et al., *To Notify or Not To Notify: STD Patients' Perspectives of Partner Notification in Seattle*, 27 SEXUALLY TRANSMITTED DISEASES 193, 193-94 (2000).

36. *See* Gostin & Hodge, *supra* note 26, at 28 tbl.A.

37. Nancy E. Kass & Andrea C. Gielen, *The Ethics of Contact Tracing Programs and Their Implications for Women*, 5 DUKE J. GENDER L. & POL'Y 89, 90-91 (1998).

38. *Id.*

39. *Id.*

40. *Id.*

41. *See, e.g.*, Gostin et al., *supra* note 21, at 95 (detailing budget cuts); Chris Joyner, *Public Health: Protect or Neglect?*, CLARION-LEDGER, June 26, 2006, at A4, *available at* 2006 WLNR

deploy a triage approach with much curtailed ability to engage in labor-intensive contact tracing and notification.[42] With few overburdened officials to work on thousands of new cases, people are slipping through gaping cracks in the system.[43]

B. Heavier Burdens Borne by the Socially Marginalized

In addition to cumbersome contact tracing, another vestige of the past that lingers in the present, preserved through a transformed rationale, is the focus on socially marginalized groups.[44] This emphasis can seem like good sense: in a world of limited resources, interventions should target populations that statistically seem hardest hit by the problem and are most in need of help.[45] While it is true that historically marginalized communities disproportionately bear the burdens of this category of affliction, as with other disproportionately distributed social burdens,[46] the danger is losing sight of the responsibility and risk of all across communities. Indeed, researchers believe that data submitted to the CDC by public agencies substantially underreport disease prevalence among whites of higher socioeconomic status and overreport prevalence among minorities who are disproportionately economically disadvantaged and must turn to public clinics.[47] Because data are more readily collected through public

25319621 (noting funding cut for the state health department of 40 percent in the past five years, the elimination of 2900 positions and that prevention programs across the nation are similarly suffering).

42. *See, e.g.*, *Public Health: Protect or Neglect?*, *supra* note 41.

43. *Id.*

44. Reva Siegel influentially theorized the phenomenon of preservation-through-transformation of the impact of laws that disproportionately target the marginalized, even as justificatory rhetoric changes in sex equality and antidiscrimination law. *See, e.g.*, Reva Siegel, *"The Rule of Love": Wife-Beating as Prerogative and Privacy*, 105 YALE L.J. 2117, 2180-88 (1996).

45. *See, e.g.*, Gary Marks et al., *Meta-Analysis of High-Risk Sexual Behavior in Persons Aware and Unaware They Are Infected with HIV in the United States*, 39 J. ACQUIRED IMMUNE DEFICIENCY SYNDROME 446, 451 (2005) (arguing for public health campaigns that target young men who have sex with men [MSM], particularly young MSM of color, and routine HIV testing "in high HIV prevalence areas" and venues that "attract high-risk persons").

46. *See, e.g.*, Donna Hubbard McCree & Matthew Hogben, *The Contribution to and Context of Other Sexually Transmitted Diseases and Tuberculosis in the HIV/AIDS Epidemic Among African Americans*, *in* AFRICAN AMERICANS AND HIV/AIDS: UNDERSTANDING AND ADDRESSING THE EPIDEMIC 3 (Donna Hubbard McCree et al. eds., 2010) (detailing the significant disparities in prevalence rates of chronic diseases, including cancer, cardiovascular diseases, hypertension, diabetes and HIV/AIDS among ethnic minorities in the United States). This article also reports that African Americans are the most disproportionately impacted by chlamydia, gonorrhea and HIV because of structural inequities including higher poverty, higher incarceration rates and lack of healthcare access. *Id.*

47. *See, e.g.*, E. O. Laumann et al., *Monitoring the AIDS Epidemic in the United States: A Network Approach*, 244 SCIENCE 1186, 1186-89 (1989) (reporting that data provided to the CDC may substantially underestimate prevalence among whites of higher socioeconomic status, overrepresent minorities, and overstate prevalence in the East while understating prevalence in the

programs, heavier surveillance of socially marginalized groups—who are often also economically marginalized and more reliant on these programs—may skew prevalence statistics.[48] Such skewed statistics aggravate the sense that STDs are about "them" rather than the collective "us." This perception entrenches heuristics about who is "safe" and who is not.[49]

1. The Historical Usual Out-Group Suspects

Which marginalized groups are deemed suspect has varied with the prevailing narratives and fears of the time. Socially and economically marginalized groups targeted for heavier intervention have ranged from immigrants, to prostitutes, to racial minorities. In the era of rapid industrialization at the turn of the eighteenth century, for example, immigrants packed into teeming cities were deemed reservoirs of prostitution and venereal diseases.[50] Dr. Howard Kelly, then one of the nation's leading gynecologists, colorfully claimed, "The tide of [venereal disease] has been raising [sic] continually owing to incessant impouring [sic] of a large foreign population with lower ideals."[51]

Prostitutes—often perceived as doubly foreign because of their alleged foreign origin and their outsider status in a culture where sex was reserved for marriage—became the target for campaigns of control.[52] Prostitutes were blamed for debauching men, who in turn spread the affliction to the "pure," "innocent," American woman.[53] Prostitutes were targeted for "reglementation"—compulsory medical inspection and "treatment" with highly toxic and ineffective remedies for syphilis.[54]

Traces of this past linger in contemporary law. New Jersey law, for example,

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Midwest).

48. *See, e.g.*, ALLAN M. BRANDT, NO MAGIC BULLET: A SOCIAL HISTORY OF VENEREAL DISEASE IN THE UNITED STATES SINCE 1880, at 158 (1987) (noting concern among black physicians that STD prevalence statistics were overreported for black communities, which were subject to greater surveillance because of impoverishment and reliance on public health systems); Taunya L. Banks, *Women and AIDS – Racism, Classism and Sexism*, 17 N.Y.U. REV. L. & SOC. CHANGE 351, 354 (1990) (cautioning that prevalence statistics may unfairly stigmatize women of color because statistics are mainly gathered from publicly funded health programs where disproportionately economically marginalized women of color must get their healthcare whereas "the extent of underreporting among white women is unknown"); William C. Miller et al., *Prevalence of Chlamydial and Gonococcal Infections Among Young Adults in the United States*, 291 JAMA 2229, 2229-34 (2004) (arguing that "reporting bias and minority groups' disproportionate use of publicly funded clinics may affect previous prevalence estimates derived from clinics," but "these sources of bias cannot explain the racial/ethnic disparities" in the study's general population sample).

49. *See infra* Part III for a discussion of studies reporting reliance on heuristics for who is "safe."

50. BRANDT, *supra* note 48, at 20-21.

51. *Id.* at 23.

52. *Id.* at 21, 31-35.

53. *Id.* at 31-32.

54. *See* Gostin & Hodge, *supra* note 26, at 17-18.

defines prostitutes as a class categorically suspected of having venereal diseases and subject to testing at any time.[55] New York law provides for compulsory STD examination of people arrested for prostitution or patronizing prostitutes.[56] This approach of targeting certain groups for particularly harsh interventions is commonly provided for by statute.[57]

Another approach with historical roots is the targeting of people of color for stronger interventions because of the perception of higher risk. During the World War I era, black troops were required to undergo compulsory prophylaxis because of the belief that black troops had much higher rates of venereal disease infection.[58] In the 1930s, Surgeon General Thomas Parran resolved to make venereal disease "The Next Great Plague to Go" and implemented "Wasserman dragnets" for testing groups deemed at higher risk for venereal disease, including the black community.[59]

The association of black people with syphilis at the height of "syphilophobia" between the two world wars revealed the "stereotyping moralism" surrounding the control of venereal disease.[60] Medical opinion deemed respectable in some quarters posited that the longstanding scourge of syphilis originated in Africa and that black skin arose from syphilitic sores.[61] Black physicians took issue with the claims that the dreaded disease was rampant among black communities, noting that surveillance was skewed and heavier in communities of color.[62] Then, as now, structural inequities did produce higher prevalence rates, but statistics were also skewed because of the stronger surveillance and resultant data collection in disadvantaged communities, which are disproportionately communities of color, reliant on public health services.[63]

2. Continued Heightened Focus

In contemporary times, heavier intervention and surveillance continues to be advocated for the most vulnerable groups, which are defined in terms of risk, but also map onto the socially marginalized. Early in the HIV epidemic, for example, groups targeted for intervention were "traditional 'high-risk' groups," such as commercial sex workers.[64] Because sex workers typically operate outside of

55. N.J. STAT. ANN. § 26:4-32 (West 2011).

56. N.Y. PUB. HEALTH LAW § 2302 (McKinney 2011).

57. Gostin et al., *supra* note 21, at 110.

58. BRANDT, *supra* note 48, at 116.

59. *Id.* at 138-39, 152.

60. *Id.* at 158-59.

61. MARIANNA TORGOVNICK, GONE PRIMITIVE: SAVAGE INTELLECTS, MODERN LIVES 104 (1990).

62. BRANDT, *supra* note 48, at 158-59.

63. *See* sources cited *supra* note 48.

64. Theresa M. Exner et al., *A Review of HIV Interventions for At-Risk Women*, 1 AIDS & BEHAV. 93, 94 (1997).

political and legal recognition and protections, they are most susceptible to heaviest state intervention.

A larger dilemma for a society that has evolved in its desire for racial equality is the continued heavy burdens of surveillance on minority communities. There has been a shift to behavior-based or regional definitions of risk rather than the explicit racialized narratives of the past. Yet racial communities still bear heavier burdens because disadvantaged communities of color are overrepresented among HIV-seroprevalent geographic regions.[65]

The prevalence of STDs is greater among the most marginalized, particularly intersectionally marginalized groups, including women of color and men of color who have sex with men.[66] The same behavior, such as intercourse without a condom, may pose greater risks for people in disadvantaged minority communities because greater prevalence of disease in the community increases the likelihood of encountering an infected partner.[67] From an ecological perspective, "advantages and disadvantages tend to cluster cross-sectionally and accumulate longitudinally" in the health of communities.[68] The disparities are stark for African American men who have sex with men (MSM). Though African American MSM have fewer partners than white MSM, African American MSM experience nearly twice the rate of HIV infection of white MSM.[69]

At the intersection of the most pronounced historic gender and racial inequities, African American women experience the greatest racial disparities in infection.[70] Infection rates for African American women are between four and twenty-one percent greater than for any other racial and gender group.[71] The HIV incidence rate of African American women is nearly fifteen times that of white women and over three times that of Hispanic women.[72] African American women are less likely to receive treatment for HIV and more likely to die early because of it.[73] As of 2002, AIDS was the leading cause of death among African

65. *See* Kim M. Williams & Cynthia M. Prather, *Racism, Poverty and HIV/AIDS Among African Americans*, *in* AFRICAN AMERICANS AND HIV/AIDS: UNDERSTANDING AND ADDRESSING THE EPIDEMIC, *supra* note 46, at 31, 36 (reporting that regions experiencing the greatest economic disadvantage, racial segregation, and the greatest concentrations of communities of color are disproportionately impacted by HIV/AIDS).

66. Pamina M. Gorbach & King M. Holmes, *Transmission of STIs/HIV at the Partnership Level: Beyond Individual-Level Analyses*, 80 J. URBAN HEALTH iii15, iii18 (2003).

67. McCree & Hogben, *supra* note 46, at 3, 5.

68. David Blane, Editorial, *Social Determinants of Health – Socioeconomic Status, Social Class, and Ethnicity*, 85 AM. J. PUB. HEALTH 903, 904 (1995).

69. Rebecca Voelker, *Studies Illuminate HIV's Inequalities*, 299 JAMA 269, 269 (2008).

70. Martina Morris et al., *Concurrent Partnerships and HIV Prevalence Disparities By Race*, 99 AM. J. PUB. HEALTH 1023, 1024 (2009).

71. *Id.*

72. *HIV in the United States*, CENTERS FOR DISEASE CONTROL & PREVENTION 2, http://www.cdc.gov/hiv/resources/factsheets/PDF/us.pdf (last updated Nov. 7, 2011).

73. LINDA LEWIS ALEXANDER ET AL., NEW DIMENSIONS IN WOMEN'S HEALTH 194 (2009).

American women aged twenty-five to thirty-four years old.[74]

Hispanic women, likewise subject to economic marginalization, also suffer greater HIV incidence rates than non-Hispanic white women.[75] HIV incidence among Hispanics is more than three times the rate for non-Hispanic whites, with the disparity concentrated in Hispanic women, who are more than five times more likely than non-Hispanic white women to have HIV.[76]

Minority groups are disproportionately impacted by STD and HIV infections because a disproportionate number are economically and socially marginalized.[77] Disadvantaged groups are often concentrated in higher-risk communities marked by poverty, decreased access to healthcare and heightened surveillance when public healthcare is sought.[78] Structural socioeconomic context leads to more severe health burdens borne by communities of color because of the following factors: (1) larger proportions of the community incarcerated in dangerous and unhealthy conditions; (2) a skewed female-to-male ratio because men of color die younger and are incarcerated at a substantially disproportionate rate; (3) residential segregation; and (4) circumscribed access to health services.[79] Inequities in status and access to resources, physical abuse, and other power imbalances may also deter minority women from insisting on condom use and increase exposure to forced sex and other practices that heighten vulnerability and risk.[80]

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74. Gina M. Wingood & Ralph J. DiClemente, *HIV Prevention for Heterosexual African-American Women*, *in* AFRICAN AMERICANS AND HIV/AIDS: UNDERSTANDING AND ADDRESSING THE EPIDEMIC, *supra* note 46, at 211, 211.

75. Rosa M. González-Guarda et al., *HIV Risks, Substance Abuse and Intimate Partner Violence Among Hispanic Women and their Intimate Partners*, 19 J. ASS'N NURSES AIDS CARE 252, 252 (2008).

76. *Id.*

77. *See, e.g.*, *Poverty Rate by Race/Ethnicity, States (2008-2009), US (2009)*, STATEHEALTHFACTS.ORG, http://www.statehealthfacts.org/comparebar.jsp?ind=14&cat=1 (last visited Nov. 9, 2009) (reporting that 35% of blacks and 34% of Hispanics lived in poverty in the United States, compared to 12% of whites in 2008-2009).

78. Koray Tanfer et al., *Gender, Race, Class and Self-Reported Sexually Transmitted Disease Incidence*, 27 FAM. PLANNING PERSP. 196, 197 (1995); *see also* INST. OF MED., UNEQUAL TREATMENT: CONFRONTING RACIAL AND ETHNIC DISPARITIES IN HEALTHCARE 5-7, 35 (Brian D. Smedley et al. eds., 2002) (discussing evidence of racial disparities and inequities in healthcare treatment and access to healthcare); Miller, *supra* note 48, at 2234 (2004) (heightened surveillance); Wingood & DiClemente, *supra* note 74, at 216-18 (discussing higher-risk communities with less access to partners and resources).

79. Sandra D. Lane et al., Guest Editorial, *Structural Violence and Racial Disparity in HIV Transmission*, 15 J. HEALTH CARE FOR POOR & UNDERSERVED 319, 320-23, 326 (2004); Russell K. Robinson, *Racing the Closet*, 61 STAN. L. REV. 1463, 1525-32 (2009).

80. Gorbach & Holmes, *supra* note 66, at iii16. Researchers posit that higher rates of intimate-partner violence and fear among Hispanic women over requesting a condom contribute to the higher rates of HIV that Hispanic women suffer. González-Guarda, *supra* note 75, at 252, 253. Hispanic women face more than twice the rate of intimate-partner violence of non-Hispanic women, even when socioeconomic variables are controlled, and a study found that Hispanic women who suffered intimate-partner violence were more than six times as likely to have an STD.

The socioeconomically marginalized also bear heavier burdens of intervention. As public health officials try to shift strategy toward routine screening, controversy has stymied deployment of this tactic for the general population. Unable to deploy these strategies broadly, officials instead find it is more feasible to pursue routine screening among the economically and socially disadvantaged, who are concentrated in high-STD prevalence areas and dependent on publicly funded clinics.[81] Routine screening, which can be mandatory or have an opt-out option, is typically performed on certain groups over which the state has greater power or who are deemed at higher risk, such as immigrants or pregnant women, particularly those who cannot afford private healthcare.[82] The CDC currently recommends routine screening of pregnant women for a host of STDs including syphilis, hepatitis B, chlamydia, gonorrhea, and hepatitis C. [83] Screening pregnant women for HIV/AIDS, however, has been intensely controversial. Supporters argue that early antiretroviral therapy could dramatically reduce the risk of transmission of the virus from mother to child, but opponents worry about discriminatory treatment, diminished privacy, and the targeting of women.[84]

The CDC also has called for routine HIV screening of all people aged thirteen to sixty-four unless HIV prevalence in the patient population is less than 0.1%.[85] Proponents of widespread screening note that an estimated twenty-one to twenty-five percent of HIV-infected people do not know they are infected and detection would reduce the likelihood of transmission.[86] Diagnosis would also help prolong life expectancy with the advent of Highly Active Antiretroviral Therapy (HAART).[87] While general routine screening remains unpalatable in many quarters, cities with large communities of color that suffer

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Id. at 253, 256.

81. *See, e.g.*, Banks, *supra* note 48, at 352, 372 (noting that government-provided or funded facilities will be the ones implementing proposed routine screening and poor women of color most often receive their healthcare through these facilities).

82. Benjamin Armbruster & Margaret L. Brandeau, *Optimal Mix of Screening and Contact Tracing for Endemic Diseases*, 209 MATHEMATICAL BIOSCIENCES 386, 387 (2007).

83. *Id.*

84. For overviews of the debate, see Erin Nicholson, *Mandatory HIV Testing of Pregnant Women: Public Health Policy Considerations and Alternatives*, 9 DUKE J. GENDER & L. 175, 183-86 (2002); and Leslie E. Wolf et al., *Legal Barriers to Implementing Recommendations for Universal Prenatal HIV Testing*, 32 J.L. MED. & ETHICS 137, 138 (2004).

85. Ctrs. for Disease Control & Prevention, *Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health Care Settings*, 55 MORBIDITY & MORTALITY WKLY. REP., Sept. 22, 2006, at 1, 2, 7, *available at* http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm.

86. *See, e.g.*, Gillian D. Sanders et al., *Cost-Effectiveness of Screening for HIV in the Era of Highly Active Antiretroviral Therapy*, 352 NEW ENG. J. MED. 570, 580 (2005).

87. *Id.* (noting the inadequacy of current approaches to testing because HIV-positive people are not being identified and arguing that "the case for systematic voluntary HIV screening in healthcare settings is now compelling" because treatment with Highly Active Antiretroviral Therapy would reduce the likelihood of transmission even if risky behavior remained unchanged).

disproportionately from high infection rates are turning toward mass screening. Washington, DC has deployed a pilot program that screens high school students for chlamydia and gonorrhea, which are at epidemic levels in the city and heighten vulnerability to HIV infection.[88] The pilot is modeled after a Philadelphia program for routine STD testing of students.[89] Baltimore, Chicago, New Orleans, and New York are among other cities planning similar pilot programs.[90]

We have come a long way from the days when former President George H.W. Bush was booed for suggesting routine HIV/AIDS screening.[91] Yet routine screening remains deeply controversial and very expensive—costing an estimated eighty-six million dollars a year.[92] Critics also argue that the strategy is not cost-effective because, given individuals' ability to opt out, the strategy only focuses on people more apt to choose to mitigate risk rather than those most in need of intervention.[93] There is also concern that the program would have an uneven focus on the socially and economically marginalized, resulting in differential privacy for those who can afford private healthcare and further underscoring the sense that HIV and other STDs are a problem afflicting people on the fringes.[94]

II. AN EVOLVING PUBLIC HEALTH CHALLENGE THAT CUTS ACROSS COMMUNITIES

It is critical to look past the prevailing narratives of who is high risk (and who is not), and understand that STDs are an evolving public health challenge that cuts across social strata, sexual orientation, race, economic advantage, and other axes of differentiation. The economically advantaged historically have been better able to afford private healthcare providers that offer a greater shield, hiding the extent of the problem.[95] But the nature of the risk and its ability to "jump"

88. Darryl Fears & Nelson Hernandez, *D.C. to Offer STD Tests to All High School Students*, WASH. POST, Aug. 5, 2009, http://www.washingtonpost.com/wpdyn/content/article/2009/08/04/AR2009080403402.html.

89. *Id.*

90. *Id.*

91. Marlene Cimons & Harry Nelson, *Bush Is Booed as He Defends AIDS Proposals*, L.A. TIMES, June 2, 1987, http://articles.latimes.com/1987-06-02/news/mn-4306_1_aids-virus.

92. David R. Holtgrave, *Costs and Consequences of the US Centers for Disease Control and Prevention's Recommendations for Opt-Out HIV Testing*, 4 PLOS MED. 1011, 1015 (2007).

93. James M. Hyman et al., *Modeling the Impact of Random Screening and Contact Tracing in Reducing the Spread of HIV*, 181 MATHEMATICAL BIOSCIENCES 17, 19 (2003).

94. *See, e.g.*, Banks, *supra* note 48, at 352, 354-55, 359, 363, 370-72 (discussing dangers of differential focus on the most marginalized); *see also* Note, *Name Brands: The Effects of Intrusive HIV Legislation on High-Risk Demographic Groups*, 113 HARV. L. REV. 2098, 2103-10 (2000) (discussing concern that intrusive HIV policies will disproportionately impact minority communities).

95. *See, e.g.*, FAIRCHILD, *supra* note 13, at 75-79 (detailing underreporting and the resistance

social networks is greater because of shifts such as technologically extended networks.[96] These social, cultural, and technological shifts lead to an information deficit that poses public health challenges and impedes fully informed and autonomous consent to risk.[97]

A. Shifting Social and Sexual Norms in the Marketplace for Sex and Romance

In our consumerist-networked society, approaches to sex once taboo or outré are becoming normalized, including casual sex and shopping for partners online. The shift is sweeping across age groups, though it is most pronounced in the most sexually active age demographic of college-aged youths. The phenomenon of "casual sex" is so prevalent that sex scholars write of a "hookup culture," especially on college campuses.[98] Hookup is a colloquial term for a casual sexual encounter, typically, but not always, between people who do not know each other well.[99] This casual sexual contact can vary from kissing and fondling to oral, vaginal, and anal intercourse.[100]

The term hookup is itself becoming antiquated in our acronym and text-

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of private physicians to contact tracing).

96. *See, e.g.*, KATHERINE BOGLE, HOOKING UP: SEX, DATING, AND RELATIONSHIPS ON CAMPUS 2, 11-20 (2008) (collecting reports and describing phenomenon); Anthony Paik, *"Hookups," Dating, and Relationship Quality: Does the Type of Sexual Involvement Matter?*, 39 SOC. SCI. RES. 739, 739-80 (2010) (collecting studies pronouncing the "demise of dating" and exploring the rise in and prevalence of casual sex, as well as the shortening of time between acquaintance with someone and sex).

97. *See, e.g.*, P.M. Gorbach et al., *Don't Ask, Don't Tell: Patterns of HIV Disclosure Among HIV Positive Men Who Have Sex with Men with Recent STI Practising High Risk Behavior in Los Angeles and Seattle*, 80 SEXUALLY TRANSMITTED INFECTIONS 512, 512 (2004) (finding substantial nondisclosure of HIV-positive men to partners in unprotected sex for an array of reasons and observing that absent such information "HIV negative men lack the ability to make fully informed choices about their level of risk"); Samuel W. Perry et al., *Self-Disclosure of HIV Infection to Sexual Partners After Repeated Counseling*, 6 AIDS EDUC. & PREVENTION 403, 407 (1994) (finding substantial percentages of nondisclosure even after counseling, particularly in casual sex contexts).

98. *See, e.g.*, Caroline Heldman & Lisa Wade, *Hookup Culture: Setting a New Research Agenda*, 7 SEXUALITY RES. & SOC. POL'Y 323 (2010) (analyzing reasons for rise of hookup culture); Elizabeth L. Paul & Kristen A. Hayes, *The Casualties of 'Casual' Sex: A Qualitative Exploration of the Phenomenology of College Students' Hookups*, 19 J. SOC. & PERS. RELATIONSHIPS 639, 656 (2002) (studying the phenomena of college campus hookups).

99. Elizabeth L. Paul et al., *"Hookups": Characteristics and Correlates of College Students' Spontaneous and Anonymous Sexual Experiences*, 37 J. SEX RES. 76, 76 (2000) (defining hookup as "a sexual encounter usually lasting one night, between two people who are strangers or brief acquaintances"). *But see* Robyn L. Fielder & Michael P. Carey, *Prevalence and Characteristics of Sexual Hookups Among First-Semester Female College Students*, 36 J. SEX & MARITAL THERAPY 346, 354-55 (2010) (noting first-semester female students surveyed frequently hooked up with someone they knew relatively well, such as a friend or ex-boyfriend).

100. Fielder & Carey, *supra* note 99, at 351; *see also* Paul & Hayes, *supra* note 98, at 645 (noting that forty-one percent of students surveyed described sexual intercourse as typical hookup behavior).

happy culture. A new array of acronyms has arisen to describe casual sexual arrangements and facilitate advertising for them, particularly in online advertising for sexual partners. Common acronyms include "NSA" (No Strings Attached),[101] "FWB" (Friends with Benefits),[102] and "DDF" (Drug and Disease Free).[103] These sexual arrangements often facilitate "partner concurrency"—having more than one sexual partner in a time period—a phenomenon with public health consequences for the rapid spread of disease.[104] This section explores the two most pronounced shifts in sexual culture with epidemiological implications: the rise of casual sex and online meeting and mating.

1. The Prevalence of Casual Sex Culture

Researchers on modern sociality have pronounced traditional dating's demise and the rise of casual sex between people who know a lot less about each other than in the past.[105] As social scripts are rewritten, sex outside of relationships and concurrent relationships are becoming normalized.[106] Estimates suggest that between one-half and three-quarters of college students have had one or more casual sexual encounters.[107] A study of students at a large Northeastern university, for example, found that between seventy and seventy-eight percent of undergraduates have hooked up at least once.[108] Among those that had, the average number of hookups over the span of college was 10.28.[109] Another

101. *See No, It Doesn't Mean National Security Agency*, ATLANTA J.-CONST., Mar. 2, 2008, at C2, *available at* 2008 WLNR 4133965 (defining term)

102. *See* Melissa A. Bisson & Timothy R. Levine, *Negotiating a Friends with Benefits Relationship*, 38 ARCHIVES SEXUAL BEHAV. 66, 67 (2009) (collecting studies and exploring dynamics of FWB relationships among 125 undergraduates from a large Midwestern university).

103. *See* Leon Hale, *Learning About the Personals*, HOUS. CHRONICLE, Mar. 14, 1995, http://www.chron.com/CDA/archives/archive.mpl/1995_1261993/learning-about-the-personals.html (defining term).

104. *See, e.g.*, Anthony Paik, *The Contexts of Sexual Involvement and Concurrent Sexual Partnerships*, 42 PERSP. ON SEXUAL & REPROD. HEALTH 33, 34 (2010) (noting association between sex with casual dating partners or friends and concurrent sex partners).

105. *See, e.g.*, BOGLE, *supra* note 96, at 11-33; LAURA SESSIONS STEPP, UNHOOKED: HOW YOUNG WOMEN PURSUE SEX, DELAY LOVE AND LOSE AT BOTH 4 (2007) ("Young people have virtually abandoned dating and replaced it with . . . sexual behaviors that are detached from love and commitment . . . ."); Fielder & Carey, *supra* note 99, at 354-55; Heather Littleton et al., *Risky Situation or Harmless Fun? A Qualitative Examination of College Women's Bad Hook-Up and Rape Scripts*, 60 SEX ROLES 793, 793-95 (2009).

106. *See* Paul & Hayes, *supra* note 98, at 640-41, 656 (collecting studies).

107. *See, e.g.*, Marina Epstein et al., *"Anything from Making Out to Having Sex": Men's Negotiations of Hooking Up and Friends With Benefits Scripts*, 46 J. SEX RES. 414, 414 (2009); Littleton, *supra* note 105, at 793.

108. *See, e.g.*, Paul, *supra* note 99, at 81 (surveying 555 undergraduates at large Northeastern university and finding that 78 percent had engaged in a hookup at least once); Paul & Hayes, *supra* note 98, at 644 (surveying 187 students at a mid-sized Northeastern college and finding that seventy-eight percent of them had hooked up at least once).

109. Paul & Hayes, *supra* note 98, at 644; *see also* Paul, *supra* note 99, at 80 (10.8 average).

survey, focusing on first-semester female college students, found that sixty percent of the young women had already experienced oral, vaginal, or anal sex hookups at that early juncture in their college careers.[110]

A substantial number of students also have had a FWB arrangement permitting regular sex without commitment or romantic attachment.[111] Surveys on the prevalence of FWB arrangements suggest forty-nine to sixty-two percent of undergraduates have engaged in such conduct.[112] The main reported reason for such an arrangement was the convenience of having someone available for recreational sex without expectation of exclusivity.[113] While the terms of the arrangements vary, the lack of commitment or romantic relationship often provides the flexibility needed to have multiple partners in the same period.[114] The FWB arrangement is thus frequently associated with concurrent partnerships, which are an important factor in driving the spread of disease between intersecting and overlapping networks.[115]

Such cultural change affects non-college-aged people as well. A study of urban men and women aged eighteen through thirty-nine, for example, found that thirty-one percent of men and twenty-six percent of women had concurrent partners.[116] In a survey of adults aged eighteen to fifty-nine, one in five people reported having sex outside of a romantic relationship and a quarter said that they or their partner had more than one sex partner.[117] In the National Survey of Sexual Health and Behavior, a strikingly "sizeable minority of women and men in all age cohorts" reported that their last sexual encounter was with a "friend," rather than with a romantic or dating partner; this lead the investigators to observe that the FWB phenomenon, "might also be common across all age groups."[118] Indeed, data suggests that women between the ages of twenty-seven and forty-five are more inclined to have sex with someone they just met and engage in more sexual activity than younger women.[119] Researchers posit that

110. Fielder & Carey, *supra* note 99, at 354.

111. *See, e.g.*, Bisson & Levine, *supra* note 102, at 68 (finding that sixty percent of 125 undergraduates at a large Midwestern university surveyed had at least one FWB).

112. *Id.* at 67.

113. *Id.* at 69.

114. *See, e.g.*, Mikayla Hughes et al., *What's Love Got to Do with It? Exploring the Impact of Maintenance Rules, Love Attitudes, and Network Support on Friends with Benefits Relationships*, 69 W. J. COMM. 49, 50, 61-62 (2005).

115. *See* Paik, *supra* note 104, at 34.

116. Lisa E. Manhart et al., *Sex Partner Concurrency: Measurement, Prevalence and Correlates Among Urban 18–39-Year-Olds*, 29 SEXUALLY TRANSMITTED DISEASES 133, 136 (2002).

117. Paik, *supra* note 104, at 36-37.

118. Debby Herbenick et al., *An Event-Level Analysis of the Sexual Characteristics and Composition Among Adults Ages 18 to 59: Results from a National Probability Sample in the United States*, 7 J. SEXUAL MED. (Supp.) 346, 359 (2010).

119. Judith A. Easton et al., *Reproduction Expediting: Sexual Motivations, Fantasies, and the Ticking Biological Clock*, 49 PERSONALITY & INDIVIDUAL DIFFERENCES 516, 517, 519 (2010); *see*

older women show such willingness because of declining fertility and an evolutionary drive to "capitalize on their remaining fertility."[120] A convergence of factors, including skyrocketing divorce rates, shifts in gender roles and norms, medical and technological advances, and other social shifts, mean that even those raised with the social mores of another age are not immune from sexual culture change.[121]

Departing markedly from the model of sex within marriage of eras past, people now do not know their sexual partners as well and have scant relational repercussions to fear if unfortunate discoveries are made the morning after – or a few months after. A study of FWB relationships found that only 9.8% of them became romantic.[122] A study of hookups found that forty-nine percent of those who had sexual intercourse during the hookup never saw their partner again.[123] The traditional constraint of relational or social repercussions is thus dramatically diminished.

2. The Online Meat/Meet Market

The phenomenon of people knowing less about their sexual partners—and having more of them, perhaps concurrently—is facilitated and accelerated by shifts in technology-mediated connections. The rise of computer-mediated sociality has been rapid with the number of Internet users increasing dramatically from 20 million to 240 million in just a decade, from 1998 to 2007, as computers became affordable and ubiquitous.[124] The online meat/meet market serves as a massive hub connecting and expanding networks of people who might otherwise never meet.[125] As online partner seeking becomes more socially acceptable, the

also John Cloud, *The Science of Cougar Sex: Why Older Women Lust*, TIME, July 9, 2010, http://www.time.com/time/magazine/article/0,9171,2007422,00.html (reporting on study findings).

120. Easton, *supra* note 119, at 519-20.

121. Vanessa Schick et al., *Sexual Behaviors, Condom Use, and Sexual Health of Americans Over 50: Implications for Sexual Health Promotion for Older Adults*, 7 J. SEXUAL MED. 315, 315-316, 323 (2010).

122. Bisson & Levine, *supra* note 102, at 68 tbl.1; *see also* Paik, *supra* note 96, at 749 (finding "lower relationship quality" in nonromantic sexual relationships and finding that "many individuals who become sexually involved in nonromantic contexts never expect to have sex again with their partner" though some encounters do turn into recurrent sexual involvement, FWB arrangements or dating relationships).

123. Paul, *supra* note 99, at 81. Only twelve percent of all hookups reported resulted in a romantic relationship, with an average duration of four months. *Id.*

124. Katherine M. Hertlein & Megan Webster, *Technology, Relationships, and Problems: A Research Synthesis*, 34 J. MARITAL & FAM. THERAPY 445, 445 (2008).

125. *See* Rebecca D. Heino et al., *Relationshopping: Investigating the Market Metaphor in Online Dating*, 27 J. SOC. & PERS. RELATIONSHIPS 427, 429 (2010) (arguing that the marketplace is a salient metaphor through which online daters view the experience); Jeffrey D. Klausner et al., *Tracing a Syphilis Outbreak Through Cyberspace*, 284 JAMA 447, 449 (2000) (noting that online outlets "enable persons who otherwise might not meet each other to initiate contact in cyberspace and then meet in person").

ways we meet are expanding beyond the traditional contexts of school, work, community, and the clustering of geography and class.[126] Internet-mediated sociality has been dubbed "the new sexual revolution"[127] that "may radically change the nature of recognized sexual behaviors, much as did the birth control pill in the 1960s."[128]

Internet-mediated meeting is sometimes celebrated as a way to transcend traditional barriers of physical appearance, age, and other markers of differentiation, permitting freer intimacy and connectivity.[129] Virtual meeting without cumbersome real-time baggage enables people to explore and experiment, shedding the limitations of identity and typical scripts expected based on gender, class and age.[130] This enables exploration of fetishes, fantasies, and desires otherwise suppressed in the physical world.[131] Internet-mediated sexual liberation is therefore celebrated as an avenue for getting over one's hang-ups from the comfort of one's living room.[132] Online communities devoted to formerly socially taboo activities can provide reinforcement for similarly minded individuals, normalizing inclinations formerly hidden away.[133]

Most powerfully, the Internet expands the marketplace for meeting people, particularly as online connections are shedding the old stigma that they are the resort for the desperate or weird.[134] An estimated sixteen million Americans have used online meeting services.[135] Sites such as Craigslist, Match.Com, Plenty of Fish, Gay.Com and other venues help people connect in expanded

126. *See* Al Cooper & Eric Griffin-Shelley, *Introduction. The Internet: The Next Sexual Revolution*, *in* SEX & THE INTERNET: A GUIDEBOOK FOR CLINICIANS 5 (Al Cooper ed., 2002) (describing transcending of real-time constraints).

127. *Id.* at 2.

128. James F. Quinn & Craig J. Forsyth, *Describing Sexual Behavior in the Era of the Internet: A Typology for Empirical Research*, 26 DEVIANT BEHAV. 191, 196-97 (2005).

129. Cooper & Griffin-Shelley, *supra* note 126, at 5.

130. *See, e.g.*, Nicola M. Döring, *The Internet's Impact on Sexuality*, 25 COMPUTERS HUM. BEHAV. 1089, 1095 (2009) (describing sexually empowering fantasy exploration); Kimberly S. Young, *Internet Sex Addiction: Risk Factors, Stages of Development and Treatment*, 52 AM. BEHAV. SCIENTIST 21, 23, 28 (2008) (describing a fifty-one-year-old grandmother raised Mormon in rural Utah who was able to explore sexual domination fantasies she had kept "bottled up inside" and a fifty-two-year-old Vancouver nurse who explored her fantasy to be a dominatrix).

131. *See, e.g.*, Cooper & Griffin-Shelley, *supra* note 126, at 5 (discussing how the Internet breaks down interpersonal communication barriers); Jennifer L. Gibbs et al., *Self-Presentation in Online Personals: The Role of Anticipated Future Interaction Self-Disclosure, and Perceived Success in Internet Dating*, 33 COMM. RES. 152, 156 (2006) (noting intimacy acceleration).

132. *See, e.g.*, REGINA LYNN, THE SEXUAL REVOLUTION 2.0 (2006).

133. Quinn & Forsyth, *supra* note 128, at 201-03.

134. Gibbs, *supra* note 131, at 153; Amy Harmon, *Online Dating Sheds Its Stigma as Losers.Com*, N.Y. TIMES, June 29, 2003, http://www.nytimes.com/2003/06/29/us/online-dating-sheds-its-stigma-as-loserscom.html?pagewanted=all&src=pm.

135. Catalina Toma et al., *Separating Fact from Fiction: An Examination of Deceptive Self-Presentation in Online Dating Profiles*, 34 PERSONALITY & SOC. PSYCH. BULL. 1023, 1023 (2008).

configurations.[136] These widened networks mean, however, that people have less reliable information than existed in old contexts of meeting where community knowledge provides a check.[137] Internet sites such as Adult FriendFinder and Craigslist also facilitate FWB and casual sex seeking in addition to long-term relationship (LTR)-seeking.[138] While data regarding the prevalence of online sex seeking is scarce and probably skewed through underreporting, we have some statistics. One 2006 British survey indicated that ten percent of heterosexual men and about five percent of heterosexual women had used the Internet to seek sex partners within the previous twelve months.[139] For gay men, the percentage that had used the Internet to find a sex partner rose to about 43.5.[140]

Such sites still suffer from a scarcity of women willing to sign on, with a five-to-one-male-to-female ratio for an online meeting venue AdultSpace.com, for example, and OnLineBootyCall.com offering a $10,000 reward for the person who recruits the most women to the site. Critics nonetheless claim that the plethora of sites threaten to turn sex into a "grocery market experience."[141] Indeed, users often view the online meeting and mating experience through the metaphor of the marketplace, in terms of searches, self-presentation, and playing the numbers to hedge bets in case connections do not work out.[142]

While shopping for romantic and sexual partners is streamlined by searches based on age, race, body shape and profession, other information such as past partners, reputation, and "real" goals for meeting are more opaque than they were in the past, when friends and community members supplied history, background and information.[143] Despite the lack of reliable contextual information about people we meet online, surveys indicate that communication behind the safety of a computer screen helps accelerate the rapidity with which sex is reached by creating a sense of intensified intimacy.[144]

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136. Online daters use "uncertainty-reduction" strategies, such as Googling prospective partners, to try to make up for the information deficit. *See, e.g.*, Jennifer L. Gibbs et al., *First Comes Love, then Comes Google: An Investigation of Uncertainty Reduction Strategies and Self-Disclosure in Online Dating*, 38 COMM. RES. 70 (2011).

137. *Id.* at 71.

138. *See, e.g.*, Douglas Quenqua, *Recklessly Seeking Sex on Craigslist*, N.Y. TIMES, Apr. 17, 2009, http://www.nytimes.com/2009/04/19/fashion/19craigslist.html?pagewanted=all.

139. Graham Bolding et al., *Heterosexual Men and Women Who Seek Sex Through the Internet*, 17 INT'L J. STD & AIDS 530, 532, 533 (2006).

140. *Id.*

141. Zosia Bielski, *One Click Stands*, GLOBE & MAIL (Toronto), Apr. 9, 2009, http://www.theglobeandmail.com/life/article967802.ece.

142. Heino, *supra* note 125, at 431, 437-39; *see also, e.g.*, Mark Davis, *E-Dating, Identity and HIV Prevention: Theorising Sexualities, Risk and Network Society*, 28 SOC. HEALTH & ILLNESS 457, 468 (2008) (finding that "E-daters were focused on presenting themselves in desirable ways").

143. Jeffrey A. Hall et al., *Strategic Misrepresentation in Online Dating: The Effects of Gender, Self-Monitoring and Personality Traits*, 27 J. SOC. & PERS. RELATIONSHIPS 117, 126, 132 (2010) (discussing masking of relationship history and other personal attributes).

144. *See, e.g.*, Gibbs et al., *supra* note 131, at 156 (discussing acceleration of a sense of

This sense of intimacy fostered online, however, may be based on falsehoods. Surveys assessing actual experience indicate that misrepresentation is rife online, and online-daters cite misrepresentation as a primary concern.[145] Because meetings arranged online are disembedded from context and more reliable real-time information indicators, users may invent false online personas to engage in behavior otherwise difficult to initiate.[146] A study of 5020 people who met others online found that, while women were more likely to misrepresent their weight, men were more likely to dissemble about an array of facts, from age to relationship goals.[147] There is a strong incentive to lie in the online meet market in the hopes of building a sense of intimacy and connection and maximizing the chances of a face-to-face meeting.[148]

Secret philanderers pose a particularly pronounced problem. Cheaters who misrepresent their relationship status pose potential harm to both the duped party, and the unwitting partner who thinks that, because she is in a monogamous relationship she does not need to take safeguards.[149] False representations of relationship status are rife online.[150] In one study, forty percent of online daters

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intimacy); *Social Networking Leads to Sex Faster?*, REUTERS, Jan. 25, 2011, http://www.reuters.com/article/2011/01/25/us-sex-survey-odd-idUSTRE70O4IJ20110125?feedType=RSS&sp=true (reporting that nearly 80 percent of women and 58 percent of men believe that social networking tools leads to sex faster and 38 percent of women reporting they slept with someone faster because of digital intimacy).

145. Hall, *supra* note 143, at 118; *see also* Gibbs, *supra* note 131, at 169-70 (finding the most common misrepresentations identified by experienced online daters were "physical appearance (86%), relationship goals (49%), age (46%), income (45%), and marital status (40%)").

146. *See, e.g.*, Döring, *supra* note 130, at 1095-96 (describing how online personas can change race, shed physical handicaps, change ages, and become extraordinary, escaping the real-time bonds of being unexceptional); Quinn & Forsyth, *supra* note 128, at 202-03 (discussing connections difficult to arrange in real-time to explore "deviant" sexuality).

147. Hall, *supra* note 143, at 126, 129.

148. *Id.* at 126, 132.

149. *See, e.g.*, Beatriz Lia Avila Mileham, *Online Infidelity in Internet Chat Rooms: An Ethnographic Exploration*, 23 COMPUTERS HUM. BEHAV. 11, 12-13 (2007) (exploring online cheating).

150. *See, e.g.*, Gus Goswell, *Cheating Common in Cyber Sex World*, AUSTL. BROADCASTING CORP., Sept. 24, 2009, http://www.abc.net.au/news/2009-09-24/cheating-common-in-cyber-sex-world/1441284 (reporting on study finding that more than half of internet users engaging in cybersex were either in a serious real-time relationship or married); Lyda Longa, *Study: Internet Infidelity on the Rise*, DAYTONA BEACH NEWS-J., July 18, 2003, at 1A, *available at* 2003 WLNR 16092650 (reporting on University of Florida study on online infidelity and therapists' accounts of rise in relationship crises precipitated by online relationships); Yvonne Martin, *Online Adultery Rife*, PRESS (New Zealand), June 10, 2006, at 1, *available at* 2006 WLNR 9984170 (reporting on research by Melbourne's Swinburne University finding that online daters are "almost as likely to be living with a partner (41 percent) as to be single (46 percent)"); Marie Szaniszlo, *Point, Click and Cheat*, BOS. HERALD, Dec. 14, 2003, at 3, *available at* 2003 WLNR 633589 (reporting on research indicating that Internet chatting is one of the fastest causes of breakups, accounting for potentially one-third of divorces nationally); Johanna Weidner, *Married but . . . Searching for More: Websites Help Would-Be Adulterers*, WATERLOO REGION RECORD, Feb. 16, 2008, at W1, *available at* 2008 WLNR 3063710 (reporting the claim that "a third of people on dating sites were married and

reported that, in their experience, marital status is commonly misrepresented.[151] In another study, thirteen percent of women who found sexual partners online reported that the sex partners lied about marital status.[152] Because the Internet enables connections outside of community networks, the social repercussions and checks against cheating are more readily dodged.[153] Online infidelity has become so prevalent that some sites have a "married but looking" box and others have arisen to cater to married individuals wanting to cheat.[154]

Because people connecting online often anticipate off-line real-time meetings eventually, the details they fudge or misrepresent are often those difficult to detect in a face-to-face interaction, such as STD status.[155] People may be euphemistic about STD status, leaving daters to read between ambiguous lines.[156] Studies of HIV-positive people who fail to disclose their status to their sexual partners indicate that one commonly proffered reason for not disclosing was that individuals felt a lessened sense of responsibility or concern for the sexual partner in the casual encounter context.[157] The information deficit on STD status is thus particularly pronounced when it comes to casual sex.

B. Epidemiological Ramifications

The social and sexual culture changes discussed above have epidemiological implications. STD prevalence data demonstrate cause for concern. One in four

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lying").

151. Gibbs, *supra* note 131, at 169-70.

152. Mary McFarlane et al., *Women, the Internet and Sexually Transmitted Infections*, 13 J. WOMEN'S HEALTH 689, 692 (2004).

153. *See, e.g.*, DAVID GREENFIELD, VIRTUAL ADDICTION: HELP FOR NETHEADS, CYBERFREAKS AND THOSE WHO LOVE THEM 104-107 (1999) (explaining that online-facilitated intimacy enables the timid who might otherwise not descend into adultery to proceed); MARLENE M. MAHEU & RONA B. SUBOTNIK, INFIDELITY ON THE INTERNET: VIRTUAL RELATIONSHIPS AND REAL BETRAYAL 4, 15 (2001) (describing "upheaval in social mores" through intimacies created online and the ease of meeting new partners while maintaining at least initial anonymity).

154. *See, e.g.*, Melody McDonald, *Cheaters Site Big in Texas,* HOUS. CHRONICLE, June 14, 2010, at B2, *available at* 2010 WLNR 12178442 (reporting strong success of cheating site in Texas, with 355,000 members, 108,000 of whom are women); Patricia Montimurri, *Michiganders Flock to Web Site for Flings with Married Cheaters*, DETROIT FREE PRESS, June 28, 2009, *available at* 2009 WLNR 12345194 (reporting on popularity of site and profiling one married man who secretly had sex with ten women through it).

155. Gibbs, *supra* note 131, at 157 (discussing constraints on misrepresentation because of prospect of face-to-face meeting); Toma et al., *supra* note 135, at 1024-25, 1032 (finding that eighty-one percent of online daters studied lied, but often about small things difficult to detect in face-to-face interactions because of the anticipation of meeting offline).

156. Davis, *supra* note 142, at 468.

157. *See, e.g.*, Gorbach et al., *supra* note 97, at 514 (noting that many men surveyed "expressed that if they were having casual sex with no interest in an ongoing relationship then they were unlikely to disclose" because there "was less sense of obligation to disclose to those who were viewed as only sex partners" and where feelings for the partner were lacking).

women aged fourteen to nineteen has been infected with at least one STD.[158] Since 2000, the number of adolescents between the aged of thirteen and nineteen diagnosed with HIV has been steadily increasing.[159] While college-aged youths, the demographic most active in the "hook up culture" have been dubbed the "epicenter of the HIV/AIDS epidemic,"[160] health officials have also expressed concern about rising HIV rates among youths below college age.[161] Adolescents and youths aged fifteen to twenty-four experience nearly half of all new STD infections, though these young people represent only twenty-five percent of the sexually experienced population.[162] But risk is not limited to the young and most sexually active. The rates of infection are also rising in older people, including the over-50 demographic.[163]

A host of studies warn that concurrent partnerships, and the expanded networks of sexual partners facilitated by the online meet market, help spread disease.[164] The subsections below discuss how the spread of STDs is fueled by concurrent partnerships associated with, and facilitated by, casual sex arrangements and internet-mediated connectivity.

158. Fenton, *supra* note 12, at 250.

159. CTRS. FOR DISEASE CONTROL & PREVENTION, HIV SURVEILLANCE IN ADOLESCENTS AND YOUNG ADULTS, at slide 15 (2010), *available at* http://www.cdc.gov/hiv/topics/surveillance/resources/slides/adolescents/index.htm.

160. Adededi S. Adefuye et al., *HIV Sexual Risk Behaviors and Perception of Risk Among College Students: Implications for Planning Interventions*, 9 BMC PUB. HEALTH 281, 282 (2009).

161. *See, e.g.*, Christina Boyle, *HIV Rates Rise in City Teens*, N.Y. DAILY NEWS, May 18, 2008, at 25, http://www.nydailynews.com/news/hiv-rate-rise-city-teens-article-1.330471 (reporting that HIV infection among New York City teens has risen to the highest level since 2001, with the number of infected people between ages 13 and 19 rising 29% between 2004 and 2006); Steve Blow, *Dallas County Groups Join to Fight Rise in HIV Among the Young*, DALL. MORNING NEWS, Sept. 17, 2010, http://www.dallasnews.com/news/columnists/steve-blow/20100917-Dallas-County-groups-join-to-fight-2677.ece (noting a 30% rise in HIV infections among young people aged 13 to 24 in Dallas County and quoting concern of behavioral intervention specialist that "[i]t's above an epidemic. It's a pandemic"); Christiana Sciaudone, *Youth at Risk for HIV: Health Officials Eye Rise in Cases*, STAMFORD ADVOCATE, July 31, 2005, at A1, *available at* 2005 WLNR 25529181 (reporting alarm among health officials over infection rates among youth, particularly minority youths, in light of CDC data indicating that about 50% of new HIV infections are in people under 25 and the rates of infection are increasing among heterosexual youths); *HIV, AIDS Rise Sharply Among Teens in Michigan*, KALAMAZOO GAZETTE, Dec. 1, 2009, http://www.mlive.com/news/kalamazoo/index.ssf/2009/12/post_29.html (reporting that for the fourth year in a row, HIV infection rates among Michigan teens have increased with the rate of new diagnoses among 13 to 19-year-olds doubling between 2003 and 2007).

162. STD SURVEILLANCE, *supra* note 15, at 63.

163. Sarah Boseley, *HIV Rates Double Among the Over-50s*, THE OBSERVER (UK), July 24, 2010, http://www.guardian.co.uk/lifeandstyle/2010/jul/25/hiv-increases-in-middle-age.

164. *See, e.g.*, Sevgi O. Aral, *Partner Concurrency and the STD/HIV Epidemic*, 12 CURRENT INFECTIOUS DISEASE REP. 134, 134-35 (2010); Manhart et al., *supra* note 116, at 136; Paik, *supra* note 104, at 38.

1. Concurrent Partnerships and STD Spread

Social taboos may have protective effects that are lost when the taboo erodes.[165] Such is the case with the social norm against concurrent sexual partnerships. Laying aside moralizing to look at health ramifications, an array of studies indicate that having overlapping sexual partners in a short period of time—the "concurrent partnerships" phenomenon common in casual sex culture—powerfully sustains epidemic levels of STDs such as chlamydia, gonorrhea, syphilis, and HIV.[166] Concurrent partnerships are important to fueling communicable disease spread because such partnerships maximize the probability that an infected individual will, in the period of infectiousness or highest infectiousness, transmit the disease to uninfected individuals who then pass the disease to others in their sexual network.[167] In contrast, traditional monogamy confers "the protective effect of sequence" in that earlier partners are not exposed to the diseases of the later partner.[168]

Contact tracing after STD outbreaks has frequently found rapid spread to be facilitated by two individuals with concurrent partners, which leads to the intersection of tightly connected clusters of interconnecting dyads.[169] Concurrent partnerships are particularly potent in fueling the spread of HIV because infectiousness is particularly high in the brief window after infection, rendering timing an important element.[170]

Risk is further amplified by concurrent partnerships because people in such arrangements tend not to know each other well. People who become sexually involved within the first week of a relationship are more likely to have concurrent sexual partners, in part because sex within the first week is strongly associated with casual nonromantic relationships.[171] Studies indicate that concurrent partnerships are also more prevalent in a context where people have fewer social ties to their sexual partners.[172] The lack of social ties means there are

165. *Cf.* Johan Colding & Carl Folke, *Social Taboos: Invisible Systems of Resource Management and Biological Conservation*, 11 ECOLOGICAL APPLICATIONS 584, 585-96 (2001) (discussing resource conservation effects of social taboos that act as modes of management).

166. *See, e.g.*, Gorbach & Holmes, *supra* note 66, at iii15, iii16, iii21 (collecting studies); Sara J. Nelson et al., *Measuring Sex Partner Concurrency: It's What's Missing that Counts*, 34 SEXUALLY TRANSMITTED DISEASES 801, 801 (2007) (collecting studies); Paik, *supra* note 104, at 33 (collecting studies finding that concurrent sexual partnerships are "a critical factor in the spread of STDs"); Mark L. Williams, *An Investigation of Concurrent Sex Partnering in Two Samples of Drug Users Having Large Numbers of Sex Partners*, 17 INT'L J. STD & AIDS 309, 309 (2006) (collecting studies).

167. Aral, *supra* note 164, at 134-35.

168. *Id.*

169. Paik, *supra* note 104, at 33 (collecting studies).

170. Jeffrey W. Eaton et al., *Concurrent Sexual Partnerships and Primary HIV Infection: A Critical Interaction*, 15 AIDS BEHAV. 687, 687 (2011).

171. Paik, *supra* note 104, at 40.

172. *Id.* at 35.

less reliable sources of information regarding the sexual partner to inform consent and risk exposure.

People engaged in concurrent sexual practices may also engage in other behavior associated with higher risk of STDs, including have many partners.[173] For example, a study of urban young adults aged eighteen to thirty-nine noted a stepwise increase in the proportion of individuals with concurrent partners as the number of partners increased.[174] Among men with fifteen or more lifetime sexual partners, fifty-two percent also had concurrent sexual partners.[175] Concurrent partnerships are associated with behavior that is now used to approximate members of the sexually transmitted disease core.

The "sexually transmitted disease core" or "core group" are terms referring to the small proportion of the population whose behavior drives the maintenance of endemic levels of STDs.[176] There are various definitions of the core group based on such factors as having a large number of infected sexual contacts, having a substantially higher number of sexual partners than the average person in the population, and having a rapid rate of partner change.[177]

It bears underscoring that, while the disease burden is unevenly distributed across class and race because of structural inequities (as discussed in Section I.B), membership in the core group of riskiest spreaders may cut across class and race. One study found that women in the highest socioeconomic status (SES) and education group were actually *more* likely than those of lower SES to be in the core at age twenty-one though less likely at age eighteen.[178] Among men, those in the highest SES and with the highest education were *as* likely to be in the core at twenty-one or twenty-six years of age though less likely at eighteen.[179] While those with a low education level were more likely to be in the core at eighteen years of age, by twenty-one and twenty-six those with higher education were equally or more likely to be core group members.[180] With regard to race, recent studies have shown that African Americans and Hispanics actually use condoms *more* frequently than non-Hispanic whites, thus dampening transmission efficiency and the likelihood of being a core group member.[181]

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173. *See, e.g.*, Manhart, *supra* note 116, at 136 (finding stepwise relationship); Paik, *supra* note 104, at 38 (finding likelihood of men reporting concurrent partnerships increases as the number of their prior sexual partners increases).

174. Manhart, *supra* note 116, at 136.

175. *Id.*

176. Olivier Humblet et al., *Core Group Evolution Over Time*, 30 SEXUALLY TRANSMITTED DISEASES 818, 818 (2003). For a full discussion see *infra*, Subsection IV.C.1.

177. James C. Thomas & Myra J. Tucker, *The Development and Use of the Concept of a Sexually Transmitted Disease Core*, 174 J. INFECTIOUS DISEASES S134, S135 (1996).

178. Humblet et al., *supra* note 176, at 821, 822.

179. *Id.*

180. *Id.*

181. Stephanie A. Sanders et al., *Condom Use During Most Recent Vaginal Intercourse Event Among a Probability Sample of Adults in the United States*, 7 J. SEXUAL MED. 362, 370 (2010).

2. Internet-Mediated Sex Seeking and Network Jumping

The second cultural shift with important ramifications for STD management is the turn to Internet-mediated sex seeking. "The Internet changes everything" is one of our contemporary cultural adages.[182] The Internet changes the speed, ease and risks of sex. A host of studies suggest that those who seek sex online are at greater risk for contracting an STD.[183] Online sex seeking has serious public health ramifications because Internet-mediated relationality expands webs of transmission and enables diseases to jump networks.[184] Moreover, Internet-mediated connections often come with information deficits because of the lack of traditional contextual sources of information such as community reputation—or even the barest check of gossip in a shared context such as a gym locker room identifying a particular individual as a problematic player.[185]

The power and the danger of Internet-mediated relationality is its ability to connect people outside of customary physical-space networks. When people who meet online finally connect in person, it is often outside of traditional geographical contexts. Online sex seekers often drive long distances of one hundred miles or more to meet a partner found over the Internet.[186] The expansion and connection of networks that might otherwise never intersect in a context that provides less reliable information to make informed choices enables more rapid spread of disease.[187]

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182. *See, e.g.*, Rob Walker, *When Funny Goes Viral*, N.Y. TIMES SUNDAY MAG., July 16, 2010, http://www.nytimes.com/2010/07/18/magazine/18ROFL-t.html?pagewanted=all (discussing culture of web devotees and prevalence of the phrase).

183. *See, e.g.*, Eric G. Benotsch et al., *Men Who Have Met Sex Partners Via the Internet: Prevalence, Predictors and Implications for HIV Prevention*, 31 ARCHIVES SEXUAL BEHAV. 177, 182 (2002) (finding Internet partner-seeking "was a significant predictor of having multiple partners for high-risk sexual activities"); Klausner, *supra* note 125, at 449 (finding greater likelihood of contracting syphilis when meeting partner through Internet); McFarlane, *supra* note 152, at 693 (finding women met sexual partners via the Internet have "high self-reported rates of STI, are not regularly using condoms, and are engaging in anal, oral, and vaginal sex" with those partners); Mary McFarlane et al., *The Internet as a Newly Emerging Risk Environment for Sexually Transmitted Diseases*, 284 JAMA 443, 445-46 (2000) (finding that those who reported seeking sex partners online were more likely to have had a STD had a greater number of partners); Jochen Peter & Patti M. Valkenburg, *Who Looks for Casual Dates on the Internet? A Test of the Compensation and Recreation Hypotheses*, 9 NEW MEDIA & SOC'Y 455, 456 (2007) (collecting studies).

184. *See* discussion *supra* Subsection II.A.2.

185. *Id.*

186. *See, e.g.*, McFarlane, *supra* note 152, at 692 (finding that sixty-four percent of women who had a sex partner found online traveled more than 100 miles to meet and have sex with them); Mary McFarlane et al., *Young Adults on the Internet: Risk Behaviors for Sexually Transmitted Diseases and HIV*, 31 J. ADOLESCENT HEALTH 11, 13, 15 tbl.3 (2002) (reporting findings that "the Internet may be growing in its importance to young adults' sex lives").

187. *See, e.g.*, McFarlane, *supra* note 152, at 693 (noting that the long distances traveled in meeting Internet sex partners "could result in new sexual mixing patterns, thus altering the epidemiology of sexually transmitted diseases" and because the Internet amasses people over long distances "one infected traveler can spread an STI [sexually transmitted infection] or HIV much

The ability of the Internet to reconfigure social networks is only one aspect of its risk-enhancing power. Another aspect is *who* is attracted to sex seeking online. Studies of online sex seekers find they tend to be "high sensation-seekers" more willing "to take physical and social risks" to experience "varied, novel and complex sensations."[188] Studies also indicate that online sex-seekers are more sexually permissive and more likely to engage in casual sex with concurrent partners.[189]

Of course not all people who look for a partner online are "sexual adventurers."[190] In a time when online dating is becoming more socially acceptable, and high divorce rates are sending people back into the dating arena, many may be looking for love and romance. The online boundaries between sex seekers and those looking for an LTR, however, are as permeable as a click of a button. In an environment where misrepresentation is rife, those looking for love online after divorce may instead find themselves connecting with a high-risk sexual adventurer maximizing the chances of a connection by posting or responding outside sections signaling a search for a casual encounter.[191] The recombination of networks and potential for intersection between low-risk and high-risk networks may lead to fresh infections that sustain the rate of STDs in the population.[192] Containing diseases within high-infection networks can dampen the reproduction rate, because the disease is not spreading to the uninfected.[193] The intersections between a high-risk and low-risk network that can occur in contexts such as an online dater looking for love after a divorce connecting instead with a sexual adventurer, or someone engaging in Internet-mediated infidelity while continuing to have unprotected sex with an unwitting long-term partner, allows the infection to jump networks and spread.

Moreover, because of the self-advertising imperative in the online

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faster and with much greater efficiency than ever imagined").

188. Peter & Valkenburg, *supra* note 183, at 460-62.

189. *See id.* at 460-61, 472; *see also* Döring, *supra* note 130, at 1097 (summarizing literature suggesting that the "association of Internet sex-seeking and increased likelihood of unsafe sex could be explained by mere *self-selection*").

190. *See* Kathleen E. Toomey & Richard B. Rothenberg, Editorial, *Sex and Cyberspace – Virtual Networks Lead to High-Risk Sex*, 284 JAMA 485, 486 (2000) (describing the activities of "sexual adventurers" in cyberspace).

191. *See, e.g.*, Gibbs et al., *supra* note 131, at 170 (discussing users' experiences with misrepresentation of relationship goals).

192. *See* McFarlane, *supra* note 152, at 693 (noting that Internet-facilitated connections can result in "new sexual mixing patterns, thus altering the epidemiology of sexually transmitted diseases").

193. *See, e.g.*, Ken T.D. Eames & Matt J. Keeling, *Modeling Dynamic and Network Heterogeneities in the Spread of Sexually Transmitted Diseases*, 99 PROC. NAT'L ACAD. SCI. 13330, 13330 (2002) ("[M]ost infected nodes [in a network of connected individuals] have infected neighbors, by whom they were infected or to whom they have transmitted infection. This aggregation reduces the average number of susceptible partners per infected individual and consequently slows the propagation of the epidemic.").

marketplace for sex and romance, ads and representations may be deliberately opaque, euphemistic, ambiguous, and suggestive. For example, one study noted that some online daters removed the box directly stating their HIV serostatus offered by Gay.Com (an online dating site) and instead indicated that they practiced safe sex "sometimes," rather than "always,"—an oblique code to suggest they were HIV-positive, but in a sexier way.[194] Someone not versed in the code, however, may not realize the information broadcast. Daters may not probe past an ad's claim that the poster is DDF—after all, to put a spin on one online dater's wry insight, "[t]here is nothing sexy about discussing [whether] you're HIV positive prior to doing the deed . . . ."[195] With a deficit of information, people often need to steer by ambiguous cultural cues.[196] These deficits create public health consequences and impede an individual's ability to make informed choices about sexual health.

III. DEVOLVING INFORMATION AND POWER TO ENABLE INFORMED CONSENT

As public health authorities search for ways to reorient the STD control paradigm, the way forward must address the information deficit intensified by shifts in how people meet partners today. Reforms should also help supplant highly imperfect assumptions about who is "safe," and who is not. Such assumptions lead to the entrenchment of discriminatory stereotypes, and a false sense of security and complacency about health and transmission risk among socially perceived "safe" groups. More reliable information would enable people to make more accurate judgments on the individual level and allow more efficient intervention based on behavioral information rather than group-level judgments about risk.

This Part argues that the way forward is to seed private-public partnerships that put power and information in the hands of the people in order to facilitate truly informed decisionmaking and consent, rather than concentrating it away in the state. Physicians may play important roles, acting as intermediaries for information empowerment of their patients and enabling more efficient uses of resources by prioritizing contacts that warrant greater attention from overburdened health authorities.

A. Seeding a Healthier Information Culture: Promoting DDF-Verification

In our contemporary context of prevalent casual sex and Internet-mediated connections, there is an unmet, strong desire for more reliable information to replace highly imperfect heuristics about who is "safe." The desire for, and value

194. *See, e.g.*, Davis, *supra* note 142, at 469-70, 472 (quoting online daters).

195. *Id.* at 470.

196. *See id.* at 472 (quoting interviewee who related that whenever he saw that a poster said he practiced safe sex "sometimes," he would skip the profile because "they are probably positive").

of, disease-status information is demonstrated by the ubiquity of the DDF representation as an advertising point and request in ads seeking romantic or sexual partners. The market demand for the information is also demonstrated by the fact that over sixty percent of women[197] and around sixty-four percent of young people aged eighteen to twenty-four[198] who met sexual partners online discussed HIV and STD status with their partners. Among individuals twenty-five and older the rate of inquiry was even higher—75.6% discussed HIV status and 67.8% inquired about other STDs as well.[199]

In the absence of reliable ways to verify self-serving representations, people resort to heuristics about who is "clean" or "safe" based on appearance. Heuristics are cognitive rules of thumb for making hard decisions by substituting a simpler question.[200] Heuristics may suffer from inaccuracies and biases in the prevailing culture (e.g., race and class biases), as well as in cognition (e.g., optimism bias and the sense that bad things befall others different from the actor).[201] Studies report the use of crude verification approaches and heuristics like "inspecting the partner for sores or crusts"[202] or relying on the partner's physical appearance and presentation.[203] Assumptions about prevalence of STDs in demographic groups, including racial group membership, also impact the nature of risk-assessment heuristics.[204]

More reliable information can alleviate the resort to highly imperfect and potentially discriminatory heuristics. In another context, privacy professor Lior Strahilevitz has argued that access to more reliable data may alleviate resort to illegitimate discriminatory proxies like race.[205] Increased availability of information might shift decisionmakers away from relying on troubling group-based stereotypes, permitting them to make more accurate information-assisted

197. McFarlane, *supra* note 152, at 691 tbl.1.

198. McFarlane, *supra* note 186, at 14 tbl.2.

199. *Id.*

200. Daniel Kahneman, *A Perspective on Judgment and Choice: Mapping Bounded Rationality*, 58 AM. PSYCHOLOGIST 697, 707 (2003).

201. *See* Thomas Gilovich & Dale Griffin, *Introduction–Heuristics and Biases: Then and Now*, *in* HEURISTICS AND BIASES: THE PSYCHOLOGY OF INTUITIVE JUDGMENT 1, 3 (Thomas Gilovich et al. eds., 2002) (discussing common biases that skew judgment and decisionmaking).

202. Blair Beadnell et al., *Preventing Sexually Transmitted Diseases (STD) and HIV in Women: Using Multiple Sources of Data to Inform Intervention Design*, 4 COGNITIVE & BEHAV. PRAC. 325, 332 (1997).

203. Michael Hennessy et al., *Evaluating the Risk and Attractiveness of Romantic Partners when Confronted with Contradictory Cues*, 11 AIDS & BEHAV., 479, 485-88 (2007).

204. *See, e.g.*, Elijah G. Ward et al., *Perception of HIV/AIDS Risk Among Urban, Low-Income, Senior-Housing Residents*, 16 AIDS EDUC. & PREVENTION 571, 573-74, 582 (2004) (noting "demographic factors can shape subjective risk perception indirectly by affecting one's view of self or others through popular assumptions about group categorization and/or cultural interpretation of HIV/AIDS risk typographies" and collecting studies so indicating).

205. Lior Jacob Strahilevitz, *Reputation Nation: Law in an Era of Ubiquitous Personal Information*, 102 NW. L. REV. 1667, 1681-82 (2008).

individuated judgments.[206] More reliable information has the double effect of facilitating more accurate, and less biased, decisionmaking. Judgments are based on individualized assessments, rather than group stereotypes.

The power to seed a healthier information culture and to incentivize testing is within our grasp. It would simply require a small tweak in the way STD test results are delivered and a strategy shift in public health advertising campaigns. Currently, there are myriad ways to receive test results; for example, by calling a phone line, receiving results in the mail, or even a no-news-is-good-news approach.[207] A better approach is to provide negative test results on a readily readable, password-protected standardized online site. If someone had truly recently tested DDF, this person would be able to supply the password to a prospective sexual partner for rapid, easy verification. While providing the verification password to a potential partner is voluntary, people have an incentive to share to increase their desirability in a marketplace where DDF status is both an advertising point and a requested item of information by those seeking partners.

Because the goal is to provide more reliable and trustworthy sources of information, standardization and centralization of the password-protected information is critical. When we bank, or when we check our stored personal information, we discern reliable databases from sham or untrustworthy sites based on trust in a limited, readily recognizable and well-known pool of sites with familiar addresses.[208] Similarly, the retrievable results must be in a recognizable, centralized online forum in which people may repose trust. Ideally, there should be one trusted web address from which people can log in, to avoid reliability being undermined by a plethora of fake sites.

In tandem with the provision of a more reliable method of DDF verification, a public health campaign should be deployed to seed a culture of verification. Currently, risk is amplified because in the casual sex context, many take the approach that if the partner does not ask, then they will not tell.[209] Strategies used in health campaigns over the years, from promoting condom use to transforming the social meaning of smoking from "glamorous" to "gross," may be deployed in a campaign to make verification cool.[210] Studies of intervention have underscored

206. *Id.* at 1670.

207. *See, e.g.*, Deborah Kacanek et al., *Young Incarcerated Men's Perceptions of and Experiences with HIV Testing*, 97 AM. J. PUB. HEALTH 1209, 1212, 1214 (2007) (no news is good news); *Assessing Your HIV or STD Risk*, AIDS HEALTH PROJECT, http://www.ucsf-ahp.org/HTML2/services_test_assessing.html (last visited Nov. 10, 2011) (calling in).

208. *Cf.* Robert McMillan, *Phishing Sites Explode on the Web*, PC WORLD, Feb. 26, 2007, http://www.pcworld.com/article/129288/phishing_sites_explode_on_the_web.html (describing phishing sites and strategies for avoiding phony sites such as typing in trusted addresses).

209. *See, e.g.*, Gorbach, *supra* note 97, at 514, 516 (reporting on the don't ask-don't tell approach among HIV-positive men who fail to disclose to casual sex partners despite unprotected sex).

210. *See* Gostin et al., *supra* note 21, at 73, 80 (citing examples).

the import of media, for ill and good, in promoting sexual practices.[211] Promotion by influential celebrities may go a long way to transforming social custom surrounding sex, seeding a culture of verification, and highlighting that STDs and AIDS/HIV are not an affliction of some "Other," but a risk to which all may be subject. For example, famous basketball player Magic Johnson's HIV serostatus revelation and public health promotion were important in spreading HIV/AIDS awareness and ameliorating the intense stigma surrounding the disease.[212]

Rather than the harder hammer of criminal or tort law, cultural norm shifting can be a cheaper, more effective way to achieve the social good of improved public health.[213] The accumulated experience with HIV-prevention efforts over the years has generated lessons about pathways for effective social norm-shifting and behavior-shaping intervention.[214] A meta-analysis of the array of strategies pursued found that approaches that intervene in social meaning by improving attitudes and changing social norms were more effective in fostering behavioral modifications than cruder appeals to fear.[215] Fear appeals are better suited for the blunt end of securing eschewal of an activity and ill-suited for the subtleties of influencing sexual health.[216]

Even after culture-shifting campaigns, not everyone will choose to verify, just as people still smoke and still engage in unprotected casual sex. But the provision of a more reliable way to verify and education promoting verification can ensure that the many people who *do* want to make fully informed choices are empowered to do so. Enabling more reliable password-protected online access to test results puts control over information in the hands of those who own it, while changing the incentives for voluntary information sharing to promote public health and informed consent.

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211. *See, e.g.*, Khiya Marshall et al., *A Systematic Review of Evidence-Based Behavioral Interventions for African American Youth at Risk for HIV/STI Infection, 1988-2007*, *in* AFRICAN AMERICANS AND HIV/AIDS: UNDERSTANDING AND ADDRESSING THE EPIDEMIC, *supra* note 46, at 151, 154-55 (meta-analysis of studies and analysis of power of media).

212. Judith Tedlie Moskowitz et al., *The Association Between Magic Johnson's HIV Serostatus Disclosure and Condom Use in At-Risk Respondents*, 34 J. SEX RES. 154, 160 (1997) (finding a significant proportion of the population at heightened risk for HIV changed their behavior in response to Magic Johnson's disclosure and terming his announcement a "critical moment" for social change).

213. *See, e.g.*, Cass R. Sunstein, *Social Norms and Social Roles*, 96 COLUM. L. REV. 903, 947 (1996) (arguing that governmental norm-changing may sometimes be the cheapest, most effective way to regulate).

214. Dolores Albarracin et al., *A Test of Major Assumptions About Behavior Change: A Comprehensive Look at the Effects of Passive and Active HIV-Prevention Intervention Since the Beginning of the Epidemic*, 131 PSYCHOL. BULL. 856, 856-57 (2005).

215. *Id.* at 882.

216. *Id.*

B. Physician Flags: Improving Identification of Actors in Need of Intervention

Effective disease control also requires a better way for facilitating intervention and ensuring accountability for actors whose conduct creates a particularly concerning risk to public health. The second devolution of power into the hands of people involves the ability to pinpoint those most in need of intervention in a time of budgetary strain in public health departments. We need a better avenue for people who have experienced violations of their autonomy through fraudulently attained consent to sex to report problematic actors without having to suffer the harms and slings of the traditional tort and criminal law contexts.[217]

Patients who learn they are infected are often angry with a partner for transmission and believe the transmission was intentional.[218] Women, especially, often express anger because a positive STD diagnosis led to the realization that their trust was breached and their health was endangered without their knowledge or consent.[219] And women are the fastest-growing demographic for HIV/AIDS infections.[220] Many state laws criminalize knowingly or intentionally exposing another person to HIV, AIDS and other STDs through sexual contact.[221] Yet

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217. *See* Mary D. Fan, *Sex, Privacy and Public Health in a Casual Encounters Culture*, 45 U.C. DAVIS L. REV. (forthcoming 2011) (critiquing law's traditional arsenal of criminal and tort law as avenues of redress for STD transmission).

218. Gorbach, *supra* note 35, at 199 (reporting on anger).

219. *Id.* at 198; *see also, e.g.*, Miriam R. Chacko et al., *Understanding Partner Notification (Patient Self-Referral Method) by Young Women*, 13 J. PEDIATRIC ADOLESCENT GYNECOLOGY 27, 30 (2000) (finding thirty-nine percent of young adult women participating in partner notification discussed who gave the infection to who).

220. *See, e.g.*, Rebecca Voelker, *Women Shoulder Growing HIV/AIDS Burden*, 293 JAMA 281 (2005) (reporting on the phenomenon).

221. *See, e.g.*, CAL. HEALTH & SAFETY CODE § 120291 (West 2011) ("Any person who exposes another to [HIV] by engaging in unprotected sexual activity when the infected person knows at the time of the unprotected sex that he or she is infected with HIV, has not disclosed his or her HIV-positive status, and acts with the specific intent to infect the other person with HIV, is guilty of a felony punishable by imprisonment in the state prison for three, five, or eight years. Evidence that the person had knowledge of his or her HIV-positive status, without additional evidence, shall not be sufficient to prove specific intent."); FLA. STAT. § 384.24 (2011) ("It is unlawful for any person who has chancroid, gonorrhea, granuloma inguinale, lymphogranuloma venereum, genital herpes simplex, chlamydia, nongonococcal urethritis (NGU), pelvic inflammatory disease (PID)/acute salpingitis, or syphilis, when such person knows he or she is infected with one or more of these diseases and when such person has been informed that he or she may communicate this disease to another person through sexual intercourse, to have sexual intercourse with any other person, unless such other person has been informed of the presence of the sexually transmissible disease and has consented to the sexual intercourse."); 720 ILL. COMP. STAT. 5/12-5.01 (2011) (making it a felony for someone knowing he or she is infected with HIV to expose another to bodily fluids in a manner that could result in transmission of HIV unless the other person knowingly consents to the risk); IOWA CODE § 709C.1 (2011) (same as Illinois); MD. CODE ANN., HEALTH–GEN. § 18-601.1 (West 2011) (making it a misdemeanor to knowingly transfer or attempt to transfer HIV to another); MICH. COMP. LAWS § 333.5210 (2011) (making it a felony for someone knowing he or she is HIV-infected to engage in sexual penetration of another

criminal prosecutions are rare.[222] The few that surface are often lurid, headline-grabbing, and shockingly egregious, such as: (1) the Philippe Padieu case of a serial HIV spreader who allegedly infected at least six women in Texas; [223] (2) the case of Nushawn Williams, who infected at least thirteen women and an infant with HIV and exposed at least forty women and girls to the virus, sparking a "one-man epidemic;" [224] or (3) the case of Philadelphia insurance actuary Edward I. Savitch who allegedly exposed several hundred underage teenage boys to HIV, before public health authorities got involved.[225]

In practice, criminalization of transmission is extremely controversial[226] with arguably little deterrence gained—in part because of the infrequency of prosecution and because people make sexual decisions based on more complex factors than the distant shadow of law.[227] Criminalization actually provides

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without first informing partner of serostatus); N.Y. PUB. HEALTH LAW § 2307 (McKinney 2011) ("Any person who, knowing himself or herself to be infected with an infectious venereal disease, has sexual intercourse with another shall be guilty of a misdemeanor."); VA. CODE ANN. §§ 18.2-67.4:1, (2011) (making it a felony for a person "knowing he is infected with HIV, syphilis, or hepatitis B" to have "sexual intercourse, cunnilingus, fellatio, anallingus or anal intercourse with the intent to transmit the infection to another person" and a misdemeanor for such an individual with knowledge of infection to engage in the specified sexual conduct without disclosing disease status); *see also* Andrew M. Francis & Hugo M. Mialon, *The Optimal Penalty for Sexually Transmitting HIV*, 10 AM. L. & ECON. REV. 388, 389 (2008) (noting that twenty-eight states criminalize exposure to HIV and in most make it a felony to knowingly expose another person HIV through risky sexual activity without disclosing HIV status); Zita Lazzarini et al., *Evaluating the Impact of Criminal Laws on HIV Risk Behavior*, 30 J. L. MED. & ETHICS 239, 241-43 & tbl.1, 246 (2002) (tabulating features of laws in the twenty-five states that have disease transmission or exposure statutes comparatively); James B. McArthur, Note, *As the Tide Turns: The Changing HIV/AIDS Epidemic and the Criminalization of HIV Exposure*, 94 CORNELL L. REV. 707, 709 (2009) (collecting HIV/AIDS exposure laws in twenty-one states, all passed before 2000).

222. *See* Lazzarini et al., *supra* note 221, at 244-45 (finding no prosecutions under general communicable disease or STD exposure statutes and 164 convictions over the entire United States for HIV exposure or transmission during a five-year period – mostly involving conduct such as nonconsensual sex, prostitution or assault that are also generally criminalized).

223. *See, e.g.*, Padieu v. State, No. 05-09-00796, 2010 WL 5395656 (Tex. App. Dec. 30, 2010) (affirming conviction).

224. Jennifer Frey, *Jamestown and the Story of "Nushawn's Girls,"* WASH. POST, June 1, 1991, http://www.washingtonpost.com/wp-srv/style/features/jamestown0601.htm.

225. United States *ex rel.* Savitz v. Gallagher, 800 F. Supp. 228, 230 (E.D. Pa. 1992) (explaining charges in Savitz case); Michael deCourcy Hinds, *Philadelphia Suspect: A Troubled Life*, N.Y. TIMES, Apr. 2, 1992, http://www.nytimes.com/1992/04/02/us/ philadelphia-suspect-a-troubled-life.html (describing the Savitz case).

226. The controversy over criminalization of HIV exposure is international as well as national, with the United Nations weighing in against criminalization. *See, e.g.*, UNAIDS, INTERNATIONAL CONSULTATION ON THE CRIMINALIZATION OF HIV TRANSMISSION 20-23 (2007) (expressing dismay over international trend towards criminalization and concern over stigmatization).

227. *See, e.g.*, Scott Burris et al., *Do Criminal Laws Influence HIV Risk Behavior? An Empirical Trial*, 39 ARIZ. ST. L.J. 467, 489 (2007) (finding perverse consequences and little evidence of deterrence). *But see, e.g.*, Gorbach et al., *supra* note 97, at 514, 516-17 (finding, to their surprise in light of the anti-criminalization literature, that HIV-positive high-risk individuals surveyed reported disclosure because of concern over criminalization, suggesting a deterrent effect

perverse incentives and a windfall to those who do not get tested, because they can mount a defense of lack of knowledge.[228] Moreover, putting enforcement in the criminal context deters victims from seeking redress because of the chilling effect of having to enter the criminal justice arena with its negative publicity, loss of privacy, and intimidating police and prosecutors.[229] In judging credibility, jurors especially tend to penalize victims who do not conform to norms of "proper" behavior or who have had prior consensual sex with a partner.[230] People who engage in consensual casual sex based on a representation by their partner that he or she is disease-free face difficult, entrenched, gendered stereotypes, and judgments that might prevent recovery or vindication.[231]

Intervention with potentially problematic individuals should come before multiple people are infected and lives are irrevocably changed. Budget-strapped public health authorities in triage mode need a better way to identify priorities in contact tracing.[232] Training physicians to identify and flag priority contacts for public health authorities is a more efficient way to marshal limited public health investigatory resources. Physicians already have a duty to collect the names of sexual contacts of infected individuals and report the information to public health authorities.[233] A more efficient approach to help budget-strapped public health departments identify priority cases involves doctors flagging cases where patient accounts suggest a sexual contact is engaging in behavior of greatest concern. Problematic behavior that raises priority flags could include deception to gain uninformed consent to sex.

Historically, physicians have been reluctant, yet crucial, participants in information gathering for contact tracing.[234] A longstanding official concern is the tension between protecting patient privacy and the duty to protect the public

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for some, at least).

228. *See, e.g.*, Francis & Mialon, *supra* note 221, at 391-97 (discussing perverse incentives of knowledge-based criminal penalties regime).

229. The dangers of coming forward are illustrated by the women in the case of serial STD spreader Philippe Padieu, who were called "sluts" and "deserving whores." *20/20: Women Who Contracted HIV from Serial Dater Speak Out*(ABC television broadcast Sept. 17, 2009), http://abcnews.go.com/2020/women-contracted-hiv-speak/story?id=8594640.

230. *See, e.g.*, K. L'Armand & A. Pepitone, *Judgments of Rape: A Study of Victim-Rapist Relationship and Victim Sexual History*, 8 PERSONALITY & SOC. PSYCH. BULL. 134, 135-38 (1982) (finding biases based on prior sexual history and history of consensual and casual sex); Kristen M. Williams, *Few Convictions in Rape Cases: Empirical Evidence Concerning Some Alternative Explanations*, 9 J. CRIM. JUST. 29, 36 (1981) (noting only nine percent of rape cases involving ex-boyfriends, ex-spouses or cohabitating partners resulted in conviction in DC).

231. *See* Mary Crawford & Danielle Popp, *Sexual Double Standards: A Review and Methodological Critique of Two Decades of Research*, 40 J. SEX RES. 13, 13, 20-25 (2003) (discussing double standard and social censure for women who engage in casual sex and the "bad girl/whore" perception).

232. *See supra* Section I.A., discussing the present contact-tracing paradigm under strain.

233. *See supra* Section I.A., discussing history.

234. For a history, see FAIRCHILD, *supra* note 13, at 77-80.

health by facilitating surveillance.[235] Unofficially, many physicians may also find conversations with patients about sexual history awkward and discomfiting; they may even discourage such discussion by changing the topic or through nonverbal cues such as avoiding eye contact or turning their back on patients when talking about sexual behavior.[236] Training doctors to overcome their personal sense of difficulty in inquiring about sexual history is a challenge in medical training.[237] Moreover physicians, and particularly specialists, may view themselves as managers of disease and believe that counseling and consideration of social history should be someone else's task.[238]

Yet doctors have immense authority and ability to effect change, if they choose, because patients repose great trust in their doctors and often wish their doctors would talk to them about sexual history.[239] Doctors are best situated to hear patients' accounts of disease acquisition and better understand which contacts identified by patients should be a priority for public health officials. Flagging priority contacts is not a breach of loyalty to the patient. Indeed, it may better serve a patient who feels betrayed and wants to keep others from being similarly harmed, but does not want to risk resorting to the criminal or tort law systems. Training physicians to listen to patient accounts and flag problematic contacts would better serve public health and patients who may be concerned about problematic actors but find the process for redress daunting. In a time when cases are slipping through the cracks because a few beleaguered public health officials are doing the work of many, a priority flag system that deploys a private-public partnership to help steer the discretion and power of the state would better ensure that the most important cases receive attention.

C. Objections and Answers

The biggest potential objections regarding the proposed reforms involve data quality and storage concerns. First, would verification of recent testing results give people a false sense of security? One's sexual health status may have

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235. *See id.*

236. *See, e.g.*, Ronald M. Epstein et al., *Awkward Moments in Patient-Physician Communication About HIV Risk*, 128 ANNALS INTERNAL MED. 435, 437-38, 440 (1998) (reporting such behavior).

237. Steven A. Haist et al., *Improving Students' Sexual History Inquiry and HIV Counseling with an Interactive Workshop Using Standardized Patients*, 19 J. GEN. INTERNAL MED. 549, 549, 552 (2004).

238. *See, e.g.*, Lisa R. Metsch et al., *Delivery of HIV Prevention Counseling by Physicians at HIV Medical Care Settings in 4 US Cities*, 94 AM. J. PUB. HEALTH 1186, 1190 (2004) (suggesting that infectious disease specialists were focused on primary prevention and may have believed counseling is better done by others).

239. *See, e.g.*, *id.* at 1186 (arguing that doctors have great authority because patients trust and seek their counsel and this potential needs to be better utilized); *see also* Epstein et al., *supra* note 236, at 440 (noting that patients wanted to talk to their physicians about HIV, but effective discussion was often stymied by physician discomfiture).

changed since the test because of subsequent encounters. Moreover, a test may miss a recent infection, such as HIV, because it takes an average of twenty-five days for an HIV-infected person's body to develop sufficient antibodies for detection on HIV antibody tests.[240] Second, regarding verification databases, how do we protect against fraudulent verification sites? And how do we protect against abuses that may arise from storage of sensitive information? Third, regarding priority flagging, what about the risk of false claims by distraught patients in a highly emotional context? And should we limit government storage and use of priority flag information reported by physicians to public health authorities?

First, it is true that test results are no guarantee. Notice of this fact and encouragement to take precautions should be concisely and saliently displayed. However, recent testing and willingness to share the results with a partner signals concern for one's sexual health and that of one's partner. And in a nation where in 2003 an estimated twenty-five percent of people that had HIV did not know it because they were not tested, recent testing is better than no testing.[241] As described in Part II, people are engaging in riskier configurations of sex with or without a system of better verification. People are doing it anyway; the question is whether public health approaches can better inform their decisionmaking.

Second, the data storage concerns resonate with longstanding fears about the dangers of data storage and dissemination in health privacy contexts. As early as 1977, the Supreme Court in *Whalen v. Roe* opined, "We are not unaware of the threat to privacy implicit in the accumulation of vast amounts of personal information in computerized data banks or other massive government files."[242] Nevertheless, the *Whalen* Court upheld a New York statute that required reporting the names of buyers of certain dangerous prescription drugs to public health authorities.[243] The Court noted that "an essential part of modern medical practice" involved information disclosures to public health agencies, among other entities, and cited, as an example, venereal disease reporting requirements.[244]

While data quality and storage concerns suggest the need for safeguards, this does not mean eschewing reform altogether. In considering objections, we must be cautious not to let policy progress be undermined by a "fallacious form of reasoning" induced by status quo bias that assumes reforms should be eschewed unless the "innovation can be implemented without risk of undesirable consequences."[245] The baseline for measurement should not be a hypothetical

240. *HIV Testing Basics for Consumers*, CENTERS FOR DISEASE CONTROL & PREVENTION, http://www.cdc.gov/hiv/topics/testing/resources/qa/index.htm (last updated Apr. 9, 2010).

241. Ctrs. for Disease Control & Prevention, *supra* note 85, at 2.

242. Whalen v. Roe, 429 U.S. 589, 605 (1977).

243. *Id.* at 604.

244. *Id.* at 602.

245. *See* Dan M. Kahan, *What's Really Wrong with Shaming Sanctions*, 84 TEX. L. REV. 2075, 2079 (2006) (discussing this problem in evaluating policy innovations).

ideal state, but rather the challenges of our reality.[246] What we should be asking is whether problems can be ameliorated without the costs of a reform outweighing the benefits. Safeguards surrounding information use and storage can ameliorate costs while still realizing the benefits of the proposals.

Regarding the verification database, the best way to guard against fraudulent information is strong data security surrounding a single gateway web site that points people who enter their passwords to the doctors' databases where testing results are stored. The web site can be an index-pointer system similar to the FBI's use of a centralized index that "points" the searcher to the relevant database storing the information.[247] A single address guards against a proliferation of false sites that use screen shots and imitative design to look legitimate.[248] An index-pointer system responds to the fear of centralized storage of private health information like STD status. In a form of decentralization by design, the central interface points the verifier to the right site among participating physicians' offices. Most importantly, penalties can be prescribed for unauthorized use and dissemination of STD status information penalties for misuse of STD status information in other disease reporting contexts.[249]

Third, regarding the proposal of priority flagging by physicians based on patient reports, the biggest concern is reliability. A subsidiary issue is storage of priority flag information based on potentially unreliable information. But in traditional criminal and tort avenues for redress, there also is the risk of false reporting. The concern, however, is that while the very costliness of seeking criminal or tort remedies may deter spurious claims, false claims might more readily arise in the comfort and privacy of a physician's office.

We must measure such concern against the baseline of our current practices. We already have contact reporting to public health officials, which comes with the risk of transmitting inaccurate information.[250] The proposed reform is perhaps more worrying because of the priority flag attached to certain sexual contacts. This issue can be addressed through investigation—a priority flag is not an adjudication, but rather a way to enable investigators to more efficiently expend their time in contact tracing and encouraging testing. Moreover, storage concerns may be addressed by limiting the uses of the data and the length of retention of

246. *See id.* (discussing baselines for evaluation).

247. For an account of the index-pointer system, see, for example, Mary De Ming Fan, *Reforming the Criminal Rap Sheet: Federal Timidity and the Traditional State Functions Doctrine*, 33 AM. J. CRIM. L. 31, 58 (2005).

248. *See, e.g.*, Barbara Quint, *The Market for Virtue in the Virtual*, INFO. TODAY, Oct. 1, 2001, at 8, 10 (recommending that false sites should be avoided by going to known trusted sites).

249. *See, e.g.*, MASS. GEN. LAWS ch. 111, § 119 (2011) (providing records pertaining to venereal disease "shall not be public records" and prescribing sanctions for unauthorized disclosure); N.J. STAT. ANN. § 26:4-41 (West 2011) (restricting disclosures); N.Y. PUB. HEALTH LAW § 2785 (2011) (restricting disclosure and prescribing sanctions).

250. *See supra* Section I.A (discussing contact tracing).

priority flag information and details.

CONCLUSION

The time is right for a reorientation of the prevalent approaches to STD control to meet pressing challenges. The preface to the most recent National Survey of Sexual Health and Behavior called for "communities, practitioners, and policymakers to question long-held beliefs regarding the role and responsibilities of individuals, clinical, and public health services" in order to better address the persistent costs and ravages of STDs.[251] The call for paradigm change, or at least adjustment, was offered in light of the "generational changes resulting from major demographic shifts in sexual attitudes and behaviors, combined with the global expansion of the internet; mobile technology; social networking; novel patterns of sexual mixing; globalization of sex work and technological advances . . . ."[252] This Article's proposals are offered in the spirit of rethinking the roles and responsibilities of individuals and health providers.

The responsibility for managing STDs cuts across communities and social strata, though marginalized groups have historically borne the greater burdens of surveillance and intervention. The need to brainstorm about and employ broad-based problem-solving strategies is particularly pronounced in a time when the prevalence of casual sex culture and Internet-mediated relationality are changing configurations of risk across communities. As healthcare providers and public health officials search for new ways to manage the burgeoning challenge of STDs amid cultural and technological change, a promising avenue of exploration involves changing the stance of concentrating power and information in the state.

Strategies for devolving information and power can help the STD control regime adapt to the ways people meet and mate today. Public health policies may empower people to make better-informed choices about their sexual health by facilitating more reliable methods of voluntary information sharing, seeding a healthier culture of verification, and providing a safer venue for identification of potentially problematic actors.

251. Fenton, *supra* note 12, at 250.
252. *Id.*